# Washburn University Meeting of the Faculty Senate March 2, 2020 3:00 PM – Forum Room, BTAC

- I. Call to Order
- II. Approve minutes of the Faculty Senate Meeting of February 17, 2020 (pp. 2-7)
- III. President's Opening Remarks
- IV. Report from the Faculty Representative to the Board of Regents
- V. VPAA Update Dr. JuliAnn Mazachek
- VI. Consent Agenda
  - Faculty Senate Committee Reports
    - i. Approve the Faculty Affairs Committee Meeting Minutes from September 23, 2019 (p. 8)
  - University Committee Reports
    - Receive the Academic Diversity & Inclusion Committee Meeting Minutes of December 10, 2019 (pp. 9-11)
- VII. Old Business
  - 20-7 School of Business Concentration in Data Analytics (Hickman) (pp.12-53)
  - 20-9 Washburn policy on children in the workplace (Prasch) (pp.54-57)
- VIII. New Business: none
- IX. Information Items
  - Changes in language to Course Modalities (Ball) (p. 58)
- X. Discussion Items
  - STAR Report (Bearman) (pp. 59-66)
- XI. Announcement
- XII. Adjournment

# Washburn University Meeting of the Faculty Senate February 17, 2020 3:00 PM – Forum Room, BTAC

Present: Barker, Beatie, Byrne Cook (M), Cook (S), Dodge, Friesen, González-Abellás, Grimmer, Grant, Huff, Jones, Juma, Krug, Mazachek, Miller, Morse, Pierce, Prasch, Ricklefs, Sainato, Schmidt (P), Schmidt (S), Smith, Wang, Wasserstein, Woody, Zwikstra

Absent:, Childers, Douglass, Menninger-Corder, Romig, Stevens, Watson

Guests: Ball (J), Grospitch, Lee, Liedtke

- I. Call to Order
- II. Approved minutes of the Faculty Senate Meeting of February 3, 2020
- III. President's Opening Remarks
  - Proposal to use consent agendas for committee minutes (not action items) so that they can be bundled together. If we move in this direction, someone can ask for an item to be removed and discussed individually.
  - Washburn Theater is showing Trifle go see a play and support the WU community.
  - Action item 20-7 was lacking some of the information provided to AA.
     Materials could not be sent late, as we would have missed the six days of review. The item is pulled from the agenda and will be seen on March 2<sup>nd</sup>.
  - KBOR faculty senate presidents have drafted a freedom of expression resolution to be moved forward. AA will bring forward a policy on academic freedom for WU in the next few weeks.
  - Faculty Affairs is moving forward with children on campus issues in the March 2<sup>nd</sup> meeting (Prasch)
- IV. Report from the Faculty Representative to the Board of Regents
  - The last meeting of WUBoR was Thursday February 6<sup>th</sup>
  - The indoor practice facility is on time and budget; plans to open October 2020
  - The new law school has a timeline of being finished in fall 2022

- Honorary degree candidates were approved
  - i. Elizabeth Farnsworth, School of Applied Studies, Doctor of Humane Letters
  - ii. Gilbert Galle, School of Business, Doctor of Commerce
  - iii. Pedro Irigonegaray, School of Law, Doctor of Law
  - iv. Robert Meinershagen, College of Arts and Sciences, Doctor of Science
- New School of Nursing dean, Jane Carpenter, introduced
- On the day of giving there were more than 500 individual donors who donated \$290k (including matching funds).
- Crystal Leming, Director of Counseling, presented a report regarding mental health services at Washburn. A national study on the mental health needs of students suggests that 38 percent of college students have a mental health concern or condition (Mazachek)
- V. VPAA Update Dr. JuliAnn Mazachek
  - The electronic catalog will be available as soon as June; currently working to convert banner. Taking what has been a PDF and turn into a searchable document. Will be updated automatically to reduce the duplication of work.
    - i. Barker asked about the archiving of the catalogs. There will now be a date when catalogs officially switch over, previous catalogs will be archived.
    - ii. Ball stated that we can make the updates to the catalog as they are sent to the office; the changes will only be incorporated upon the issue date of the next catalog year.
  - Annual departmental reports have been discussed with many individuals across campus to find out about what the departments and programs are doing, determine concerns, brainstorm ideas to address problems, and plan for the future. Appreciative of the work done by WU educators.
  - Enrollment, as measured in the twenty day count, came in as projected for the academic year. Adjustments to enrollment projections had been completed during fall semester. Details about impact on revenue are being

sorted now and can expect the campus community will see the numbers soon (next meeting)

- i. Byrne asked for and received confirmation that the numbers are on target to the projections after the adjustments were made.
- Campus enrollment is down approximately five percent this spring; the same last fall. It is anticipated, the deans and chairs did well to provide suitable budget cuts during the fall semester.
- Census
  - i. If students live in residence in Topeka nine months of the year, they will be counted as a Topeka resident. Please encourage students to be counted, as there are federal funds which follow to add to the budget of our community and will result in Topeka better serving them.
  - ii. DeSota, and a campus committee has been working with the census on behalf of WU. He is available to answer more questions via phone / email.
  - iii. Fliers passed out
- VI. Faculty Senate Committee Reports
  - Approved the Academic Affairs Committee Meeting Minutes from January 27, 2020.
- VII. University Committee Reports: None
- VIII. Old Business
  - 20-7 School of Business Concentration in Data Analytics (Hickman)
     Moved to the next meeting
  - 20-8 Revision to Admission Standards (Liedtke)
    - Edits were made in the document regarding a typo which suggested a GPA of 3.5 for the ignite program, which should have read 2.5.
    - ii. The document is meant to better codify the admission requirements. KBoR has recently updated their admission requirements, and we followed suit in codification without changes.

GPA requirements at many other regional schools are now similar to ours. (Mazachek)

- iii. Standards may have been changed when the projected number of students attending university in Kansas was adjusted last year. (Barker)
- iv. Prasch suggested our admission requirements are a 2.25 GPA, then these students will no longer be in the ignite program. Liedtke confirmed that these students will now have regular admission, and will be provided with access to programs to ensure their success, including the ignite program.
- v. Morse noted that ignite now only takes 40 students, and asked if there is more funding to grow that number. She would also like to have an approximation of how many people on campus could be part of ignite. Mazachek stated that there is not money for additional students, but there are grants, such as the Title III Grant we have for five years provided for additional people and resources, that we are always applying for. Currently working on a TRIO grant.
- vi. Byrne mentioned that now that most other schools are effectively open admission, 87 percent of high school graduates can now choose other places rather than ours. Mazachek believes this might not be true, as there are already exception students admitted elsewhere that do not meet admission GPA requirements. This accounts for up to ten percent of their student body.
- vii. Approved unanimously and moves to general faculty as an information item.
- IX. New Business: none
- X. Information Items
  - Changes to Faculty Handbook (Jackson)
    - i. Changes have been made. Only seeing this again, as the senate approved and sent it to the handbook committee. The constitution

was removed from the handbook and replaced with a link to ensure there is only one constitution document.

- XI. Discussion Items
  - Human Resources follow up (Lee)
    - i. Handout from Barker emailed this afternoon
    - ii. There are 20-25 employment classes, each has own rules and regulations to follow due to a number of variables. Found that the part time temporary staff classifications needed improved due to administrative inefficiencies and campus leaders were notified that there would be changes to this line.
    - iii. Schmidt (S) confirmed that this is not student employees.
    - iv. Morse asked how the issues identified and whether they came through academic departments. Lee stated that it was the *incidental* category that was appearing too much and the 999 category in budget was being encumbered. Budget management did not want the money encumbered, and these items were moved to one temporary category. Mazackek noted that they were seeing 999 at Tech.
    - v. Wang explained that the art department has to use models all the time and there are special situations the model may not be able to show up. Asked if there might be a retroactive process to pay, as per HR, they have to hire someone before they can work. Barker suggested that the retroactive hiring practices would need to take place at the department level. Lee provided that advertisements and temporary hiring is best practice; we can also hire people we have in mind, and new employees can do most forms online except the I9.
    - vi. Miller having issues similar to Wang. The change seemed to increase the requirements of paper work, adverts, and references for student workers. Lee stated that this is handled by the financial aid office, which requires a brief employment application, signature,

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and positions they are seeking. The new student employment coordinator may be someone who can speak to this.

- vii. Lee announced that there are workshops to train the in house coordinators. The senate had not been made aware of this; there should be better advertisement for these trainings. Prasch asked about when background checks are required. This is listed in the WUPrm. Usually necessary if the position involves students and money.
- viii. Zwikstra asked about honorariums; it is not necessary for these to go through HR.
- XII. Announcements
  - Barker announced that documents from the School of Business Action Item 20-7 would be included in the next agenda. Please email Hickman for questions and concerns prior to the next meeting if you can. If not, come with questions – it is your responsibility to be active in faculty governance. Schmidt (P) is also willing to field questions.
  - Jones announced that Aperion registration opens tomorrow for April 17<sup>th</sup>.
  - Jones announced the Thomas L. King Lecture in Religious Studies at 7:30 pm on February 25<sup>th</sup>. Dr. Cyrus Zargar will present "Muslim Encounters with the Christian Other in Persian Sufi Poetry"
- XIII. Adjournment 3:47

Faculty Affairs Committee Meeting Washburn University 9-23-19

Attendance: DeSota, Huff, Friesen, Prasch, Romig, Smith, Watson, Woody, Zwikstra

Minutes:

Meeting called to order by Prasch at 3:01 p.m.

Minutes were approved from April 22, 2019.

Children on campus- The Faculty Affairs committee would like to create a subcommittee to address the issue of children on campus. The Faculty Affairs committee members selected to work on this project will eventually be part of a larger university committee including staff and administrative members that will address equity, accessibility to childcare, insurance, and other topics as necessary. Huff, Prasch, and Watson expressed interest in working on this project. The committee approved a motion for these three members to begin work on this project.

Adjourned by Prasch at 3:16 p.m.

# Academic Diversity & Inclusion Committee Meeting December 10, 2019 1 PM Shawnee Room

Present: Berumen, Barraclough, Brown, Dempsey-Swopes, Desota, Erby, Etzel, Gibbons, Grant, Hart, Juma, Kendall-Morwick, Lambing, McClendon, Miller, Morse, O'Neill, Petersen, Posey, Sundal, Thimesch, Wasserstein

- I. Approval of minutes from November 12 meeting
- II. Reports from Student Organization Meetings
  - a. First Generation group will not meet again until the first Wednesday of February at 4 pm.
  - b. Wasserstein attended HALO's 11/19 meeting with Anita Austin in which community participation and engagement were discussed.
  - c. Spring semester events
    - i. Dempsey-Swopes announced a step show at 7 pm on February 14th.
- **III. New Business** 
  - a. Campus Climate Survey will be implemented between January 27 and February 14
    - Skyfactor will be administering the survey. The survey will be open to all WU community members with different questions for faculty, staff, and students.
      - 1. WU can add up to 20 institution specific questions.
        - a. Miller suggested the text displayed before the survey should include a definition of what climate means and what the survey is intended to do. May also include what the data will be used for.
          Petersen suggested there is a potential for validity issues if definitions are provided. It would be best to include multiple questions over the same measure to ensure the respondent understands
        - b. Wasserstein stated demographic questions should include more options; should have more open ended questions for richer feedback. McClendon agrees – how do Saudi students answer? What does unknown mean? Miller would like to see some proxy

questions for class. Another suggestion was to add something regarding religion / faith / lack thereof.

- c. Others suggested the inclusion of the amount of time one works; whether employment is on or off campus. Questions about family, including kids, parents, or otherwise should be included as well.
- d. Kendall-Morwick would like to see questions that ask about the amount of time individual spend with those different from themselves. Petersen suggested adding something about places and organizations to help with this.
- e. Grant offered that the questions asking about perceptions of faculty and staff should be separated as experiences will differ.
- f. Miller would like to in the learning section questions about selfefficacy and confidence. Ask about what tools and services the students would like to see on campus.
- g. Morse believes that we should be careful about number of questions added. Focus groups may be key after the fact to have more of those open ended questions
- 2. Skyfactor will provide WU the a comparison of results to other institutions.
  - a. Who will analyze the data? Can the research subcommittee be involved?
- 3. There is a way to check for updates on the response from the survey
  - a. Petersen asked if we would be getting a good idea of the demographic proportionality to the rest of the university.
  - b. Can look to previous studies to determine what kind of students were more likely to fill it out and who we should focus the most advertisement toward.
- 4. Dempsey Swopes faculty have a hard time getting people engaged.
  - a. Morse suggested that extra credit worked in the past to encourage participation. The survey could provide a certificate when it had been completed for proof. Wasserstein believes this is something

many faculty will be willing to do. Miller suggested a drawing may also be beneficial; use a link at the end of the survey to take participants to another site where they can enter.

- b. Morse advertised previous surveys well in advance, and suggested an email blast before winter break and the use of social media. administrator.
- c. Barraclough suggested reaching out to the student organization mentors and having a table at Bowtie would be good for advertisement.
- b. WUmester
  - i. There is a whole team working to plan and promote the effort. Dates for events are in the process of being confirmed.
  - ii. There is C-TEL workshop planned for December 16 about how to incorporate the topic into spring courses.
  - iii. Get in touch with additional event ideas.
- c. WUmester 2021 discussion
  - 1. Ideas: Climate crisis and environmental justice; climate change and sustainability
  - Goal for the February meeting is to have a draft of language and titles that we can discuss. Kendall-Morwick suggested she could work on this.
  - 3. Miller will find something on how "changing climates" has been presented at other conferences.
- IV. Discussion Items
  - a. Diversity designation in catalog
    - i. There is support from the VPAA for courses to be designated in the future in the online and hard copy catalog. If you are interested in being involved in this possibility, get in touch with Erby.
- V. Adjournment 2:00

#### FACULTY AGENDA ITEM

Date: January 27, 2020

Submitted by: Tom Hickman, x1308

SUBJECT: School of Business - Concentration in Data Analytics

Description:

This major area of concentration will build on the BU 248 Foundations of Data Analysis course that was approved as a business elective in spring 2019 and then as part of the business core for all business students in fall 2019. The Data Analytics Major Area of Concentration will consist of four-courses:

DA 348 Data Discovery and Management

DA 358 Data Methods and Warehousing

DA 368 Data Mining and Modeling

DA 478 Data Analytics Applied in Practice

Rationale:

Business Demand is high, there is a very limited supply of graduates in this major and salaries offered are at the high end of business salaries. The contemporary business world is inundated with an exponentially growing volume, variety and velocity of data that differs greatly from traditional forms of financial business data. The majority of available data is real-time streams, semi-structured or unstructured, and requires new skills and technologies to collect, assess, transform and store in cloud computing data repositories. To solve business problems, data need to be related, analyzed and reported in an insightful, visual manner. In its more mature form, assessment of real time data streams is first assessed using statistical and modeling methods, which often can mature into robotic process automation (RPA), which supports lower cost, and more effective business operations through predictive and prescriptive data analysis.

In the immediate local Topeka business area, the SOBU Dean and the VPAA in discussion with the business community have business leaders indicating a need for people with data analytics skills. Additionally, competing business schools in the immediate area (KU, K-State, Wichita State, UMKC, and Rockhurst) have developed data analytics programs. Adding the program will allow Washburn to remain competitive and provide graduates with the skill sets needed to be competitive in the market.

Financial Implications: New Faculty will be required – See Pro forma

Proposed Effective Date: Fall 2020

Request for Action: Approval by AAC/.FAC/FS/ Gen Fac, etc

The proposal was approved by the School of Business faculty on November 19, 2019

# Academic Affairs was interested in clarification on the following questions. Answers are provided as follows:

1. Is this an offer only to Business School students, or to address multiple audiences and needs? List those in order explicitly.

It is a new major within the School of Business. So, it is first thought of as an offer to business school students. Even so, students from other schools or the college are eligible to take the data analytics sequence with additional prerequisites:

- 1. CM 105 (prerequisite: MA112 or MA116) or CM 111 (prerequisite: one of the following: MA116, MA117, MA123, MA140, MA141, or MA151)
- 2. EC 211 (prerequisites: MA140 and one of the following: MA116, MA141, or MA151)
- 3. BU 248 (prerequisites: EN101 and one of the following: MA112 or MA116)
- 4. BU 250 (prerequisites: EN101 and one of the following: MA112, MA116, MA140, MA141, or MA151)

NOTE: The fewest number of courses to take to complete the prerequisites to the four listed prerequisites (CM105/CM116, EC211, BU248, BU250) are to take the following three courses:

- 1. EN101
- 2. MA116
- 3. MA140

The completion of the data analytics sequence would not qualify as a degree since completing that sequence alone would not fulfill the entire set of requirements for a BBA.

 Regarding goals of the concentration – does it focus beyond current on Business students only? Namely, is there a DA certificate offer for returning students (professionals)?

The current proposal is not for a certificate, it is just for the added major within the School of Business. If the major is approved, a separate proposal will be required for a possible certificate. A certificate proposal will be forthcoming in the near future. It will originate in the SOBU and will need to be approved by SOBU faculty.

3. What is required for pre-requisites for outside the Business School? Does it fit into a business minor? If yes, provide details.

See the list of prerequisites above.

It does fit into the requirements for a Business Minor. The minor is a total of 21 hours. 12 of the hours are prescriptive and 9 hours are electives. So, three of the data analytics courses (9 hours) could be used for the minor.

Approved by: AAC on date 1/27/2020

FAC on date

Faculty Senate on date

Attachments Yes x No 🗆

#### Curriculum Committee General Request Submission Form

This form requires information to be provided in two sections: (A) Now, i.e., the current status of the situation, and (B) In the Future, i.e., the change requested and how it will improve the situation in the future.

# Change request submitted by SOBU Data Analytics Committee, Gail Hoover King, Chair.

# (A) **NOW**:

- 1. What is the Current Situation which needs to be addressed? (Describe in sufficient detail)
  - a. Business Demand is high, there is a very limited supply of graduates in this major and salaries offered are at the high end of business salaries. The contemporary business world is inundated with an exponentially growing volume, variety and velocity of data that differs greatly from traditional forms of financial business data. The majority of available data is real-time streams, semi-structured or unstructured, and requires new skills and technologies to collect, assess, transform and store in cloud computing data repositories. To solve business problems, data need to be related, analyzed and reported in an insightful, visual manner. In its more mature form, assessment of real time data streams is first assessed using statistical and modeling methods, which often can mature into robotic process automation (RPA), which supports lower cost, and more effective business operations through predictive and prescriptive data analysis.
  - b. In the immediate local Topeka business area, the SOBU Dean and the VPAA in discussion with the business community have business leaders indicating a need for people with data analytics skills. Additionally, competing business schools in the immediate area (KU, K-State, Wichita State, UMKC, and Rockhurst) have developed data analytics programs. Adding the program will allow Washburn to remain competitive and provide graduates with the skill sets needed to be competitive in the market.
  - c. There is a weakness in the skill set for all fields in business. Current business students have not had the opportunity to acquire skills in working with data analytics.
  - d. Faculty in other areas (sociology, history, art, anthropology and honors program) are interested in providing data analytics skills to their students. This is an efficient way to provide a service across campus by using existing resources of the School of Business, the qualified faculty in the area.
  - e. In addition, the major will assist the School of Business to meet the AACSB Accreditation Standard 9: General Business Knowledge Areas and the soon to be released version of AACSB standards both require an increased need to add data

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analysis in the business curriculum.

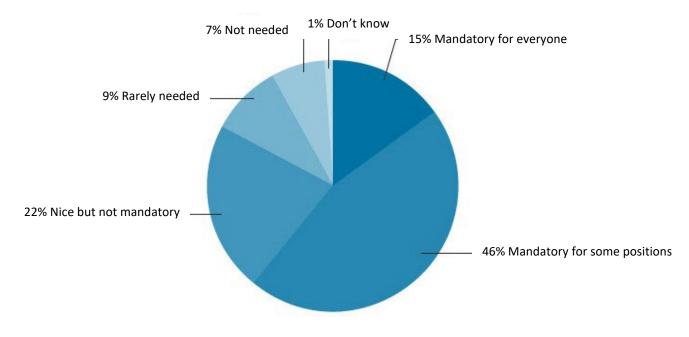
Current Standard 9

- Evidence-based decision making that integrates current and emerging business statistical techniques, <u>data management</u>, <u>data analytics and</u> <u>information technology</u> in the curriculum. Student experiences integrate realworld business strategies, privacy and security concerns, ethical issues, <u>data</u> <u>management</u>, <u>data analytics</u>, <u>technology driven changes in the work</u> <u>environment</u>, and the complexities of decision making.
- f. All areas of business have massive amounts of data (big data). Contemporary businesses are using data analytics to determine strategy, evaluate issues and markets, and develop business models. This is evidenced by multiple recent articles a few of which are listed below.
- Across all areas of study: The 2019 Gartner Report on "10 Ways CDOs Can Succeed in Forging a Data-Driven Organization," identified "culture and data literacy are the top two roadblocks for data and analytics leaders." Data literacy skills are being able to collect, manage, evaluate, and apply data, in a critical manner. The report goes on to state that by 2022, "90% of corporate strategies will explicitly mention information as a critical enterprise asset, and analytics as an essential competency... By 2023, data literacy will become an explicit and necessary driver of business value, demonstrated by its formal inclusion in over 80% of data and analytics strategies and change management programs."
- Meanwhile, mastery of data analytics can help businesses generate a higher profit margin and gain a meaningful competitive advantage. Some experts even predict that companies ignoring data analytics may be forced out of business in the long run. https://www.journalofaccountancy.com/issues/2016/aug/data-analytics-skills.html)
- *Globally, individuals in all areas of business can benefit from have data analytics skills. Top jobs in 2020 – Data Mining and Analysis* (<u>http://www.careerprofiles.info/jobs-of-2020.html</u>)</u>
- Data Analytics (https://www.edureka.co/blog/10-reasons-why-big-data-analytics-is-thebest-career-move)
- Accounting Skills You Need to Succeed On the Job (https://www.roberthalf.com/blog/salaries-and-skills/the-accounting-job-skills-you-needto-succeed) Article identified: Expertise in <u>big data analysis</u>, advanced modeling techniques and SQL; Knowledge of business intelligence software; and Analytical Skills.

- *"The next frontier in data analytics." Journal of Accountancy,* August 1, 2016. The article presented results of a Robert Half survey, "How important are business analytics skills, such as business intelligence, for your accounting and finance employees?" (See Figure 1). The article presented "skills for a data-driven practice." A practitioner interviewed stated, producing analytics starts with understanding the business objective ("What are the key questions that you expect the analysis to answer?") and identifying and obtaining relevant data sources to support the analysis. He explained that producing analytics often occurs at the junior level and explained that the ideal "analytically skilled" employee has these three characteristics:
  - Good technical skills: Understands the data and knows how to manipulate it.
  - Understanding of the business context: Can distill a business problem or opportunity into key questions to be answered and understands the business data flow and the relationship between objects within the business context.
  - Analytical mindset: Possesses an inquiring nature and intellectual curiosity.

#### FIGURE 1: Survey Results

How important are business analytics skills, such as business intelligence, for your accounting and finance employees?



Analytics Skills Are Critical (<u>https://blog.hubspot.com/agency/importance-data-analytics-skills-marketing-hires</u>)

2. How long has this situation existed in its current form? Approximately 4 years ago,

universities started adding data analytics programs. Whether this was in response to market demands or AACSB standards is not known, but it seems the two are related and resulted in a need for action.

#### 3. Why is it necessary that it be changed?

For students to be work force ready in data analytics and analysis skills as demanded in multiple areas of business.

# (B) IN THE FUTURE:

# 1. Proposed change. (Describe in sufficient detail)

This major area of concentration will build on the BU 248 Foundations of Data Analysis course that was approved as a business elective spring 2019. The Data Analytics Major Area of Concentration will consist of four-courses: DA 348 Data Discovery and Management DA 358 Data Methods and Warehousing DA 368 Data Mining and Modeling

DA 478 Data Analytics Applied in Practice

### 2. How does the proposed change solve the problem?

The Data Analytics major area of concentration will provide students with the skill sets necessary to begin a career in data analytics. The program was developed based on an understanding of the need for data analysis skills as discussed in (A)(1) above. The proposed program is based on the skills identified as relevant to business and incorporates the elements of the data processing (Figure 2) and the data literacy (Table 1).

# 3. What new problem(s) might this proposed change create?

Requiring resources: IT personal, faculty, and software.

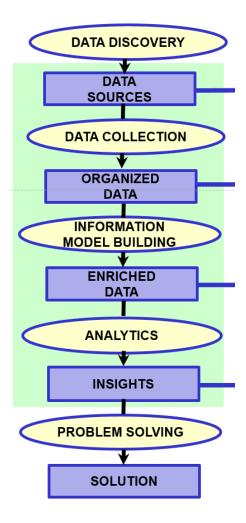
# 4. What objection(s) to the proposed change are likely to arise?

- Cost of resources
- Ability to schedule so any student major in business can double major
- Insuring the nonbusiness school prerequisites meet the need of the program
- Limiting to nonbusiness majors and alumni and practitioners who may not have the prerequisite courses or will need additional prerequisite requirements

#### 5. Are there any decision deadlines which the Committee needs to be aware of?

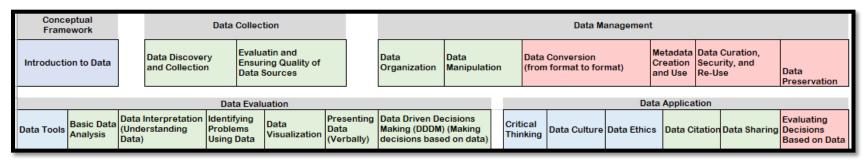
• As many competing universities in the geographic area are already offering a data analytics programs, not offering the major or waiting could mean a loss of potential students aware of the demand for data analytics skills.





Source: Geerts (2017)

#### TABLE 1: Data Literacy Model



Source: Strategies and Best Practices for Data Literacy Education: Knowledge Synthesis Report (Dalhousie University, 2015)

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Program Name	Data Analytics Major A	rea of C	oncentra	tion			PRC	O FORMA									
CIP Code (Academic Programs)	52.1301 MIS																
Revenue:	Estimates	Year	r 0 - Prepa		Year 1	FY 2020		Year 2	FY 2021		Year 3	FY 2022		Year 4	FY 2023	Year 5	Fy 2024
Est. Students/Cr Hrs Lower Division					# Students	# Cr Hrs		# Students	# Cr Hrs	5	# Students	# Cr Hrs		# Students	# Cr Hrs	# Students	-
Est. Students BU 248					100	3		197	3		237	3	Ì	237	3	237	3
Total Credit Hours*					300			591			711			711		711	
Tuition Rate Lower Division	\$300.00			\$	300		\$	300	-	\$	300		\$	300		\$ 300	
Total Revenue Lower Division				\$	90,000		\$	177,300		\$	213,300		\$	213,300		\$ 213,300	
Est. Students/Cr Hrs Upper Division					20	3	-	90	3		160	3	ł	195	3	195	3
Total Credit Hours*					60			270			480			585		585	
Tuition Rate Upper Division	\$386.00			\$	386			\$386			\$386			\$386		\$386	
Total Revenue Upper Division				\$	23,160		\$	104,220		\$	185,280		\$	225,810		\$ 225,810	
Other Revenue Sources					0			0			0			0		0	
Total DA Program Revenue				\$	113,160		\$	281,520		\$	398,580		\$	439,110		\$ 439,110	
Ongoing Expenses:						FTE			FTE			FTE			FTE		FTE
1 st Faculty Member	\$140,000			\$	-		\$	140,000	1	\$	140,000	1	\$	140,000	1	\$ 140,000	1
Benefits (25%)	25%				-		1	35,000	ļ	- i	35,000		t '	35,000		35,000	
IT Support per hr	\$20				10,000			10,000			10,000			10,000		10,000	
Benefits (25%)	25%							2,500			2,500			2,500		2,500	
Adjunct Facultycourse (\$3000 + 9% benefits)	\$3,270				4,905	1/4		_,			_,		ł	_,		_,	
Student stipends per hour	\$8.00				-	-/ .	-				l		ł				
Marketing	<i>\$0.00</i>	\$	5,000		5,000			5,000			2,500			1,000		5,000	
Travel	\$3,000	Ŷ	3,000		3,000			3,000			3,000			3,000		3,000	
Professional Development	\$1,500				1,500			1,500			1,500			1,500		1,500	
Accreditation/Membership	\$500				500			500			500			500		500	
	2200				500			500			500			500		500	
Support Materials								04.050									
Equipment Software/Technology (option 1 A	AWS)				34,268		-	81,959	•		113,371			123,366		123,366	
Total Expenses		\$	5,000		59,173		\$	279,459		\$	308,371		\$	316,866		\$ 320,866	
Total Net Revenue		\$	(5,000)	Ş	53,987		\$	2,061		\$	90,209		\$	122,244		\$ 118,244	
One-time Startup Costs																	
Furniture																	
Office Equipment																	
Computer/Software (See Equipment, Storage,	& IT Support)																
Renovation																	
Program Equipment																	
Initial Accreditation Costs																	
Total One-Time Startup Cost										-							
				I			1			1			I				
PRO FORMA																	
NOTES:																	
* Currently: Software being used is already I	icensed or is free Addi	tional co	oftware n	م مامد	neing consider	red are on	on cr	ource or provid	ed free								
currently. Software being used is alleady i	Audi		it ware no	Leus L	cing consider	cu are op			cunee								

# **New Course Approval Routing Form**

**Course Number:** DA 478

Course Title: Data Analytics Applied in Practice

Course Originator: Pamela J. Schmidt

Signature: \_\_\_\_\_

Date:

Name (print)	Recommendation	Signature	Date
Faculty	Approved/Not Approved		
Dr. Gail Hoover King	·	·	<u> </u>
Dr. Pamela Schmidt	·	·	<u> </u>
Dr. Bob Boncella	·	·	<u></u>
Dr. Rosemary Walker	·	·	<u></u>
Dr. Akhadian Harnowo	·	·	<u></u>
<u>.                                    </u>	·	·	<u></u>
Curriculum Committee Chair Dr. Tom Hickman	<u>.</u> .	<u>.                                     </u>	<u>.                                    </u>
Faculty Chair			
·	<u>.                                     </u>	·	<u> </u>
Dean			
Dr. David Sollars .	·	·	<u>.                                    </u>
Other (as necessary)			
<u>.                                    </u>	<u>.                                     </u>	<u>.                                    </u>	<u> </u>

Washburn University School of Business

# **New Course Proposal Form**

Course Originator: Pamela J. Schmidt

Department (Area): School of Business

#### 1. Proposed Catalog Description

- a. Course number: DA 478
- b. Title: Data Analytics Applied in Practice
- c. Credits: 3
- **d. Prerequisites:** DA 358 (Data Methods and Warehousing) and DA 368 (Data Mining and Modeling)
- e. Description: Students will apply the data analytics process including data discovery, transformation, organization and modeling to a real-world project and effectively communicate the solutions.

# 2. Resources (Provided by Administration with Faculty Consultation)

- **a.** How often offered? At least one semester per academic year most likely Spring semester
- **b.** Costs implications (faculty/staffing requirements full/part-time, etc.): 1/6 course load for faculty teaching, Data Analytics software and data sources
- c. Academic qualifications required to teach this course: Degree in the area of data analysis or data science, Information Systems or Computer Science, with skills in statistical analysis. Preference given to instructors with business experience, management of, or participation in, consulting engagements or large development projects, data management and/or data modeling.
- d. Current faculty that are qualified to teach the course: Dr. Pam Schmidt
- e. Anticipated enrollment: 20 students
- **f. Impact on enrollment in other classes:** As this is a capstone course, any impact on other classes would most likely have been seen earlier, as impacted by the prerequisite courses in the data analytics major.
- **g.** How might the course be expected to increase enrollment? Strong demand in the work force for data analytics talent could a) attract some business professionals seeking to expand their skills in data analysis to seek higher paid career opportunities; b) attract new undergraduate students interested in working in jobs in data analytics and related areas; and c) attract savvy undergraduate students (possibly from computer science, technology administration or business) with interest in technology that is not currently met by SOBU offerings.
- **h.** If enrollment will not increase where will these students come from? This major could attract students in the School of Business, attract a few students from outside the school as a secondary area of emphasis and/or a dual major with any other major in the School of Business.
- i. Signature from Dean's Office \_\_\_\_\_\_

# 3. Pedagogy

**a.** Academic justification for this course: Business organizations are under pressures to adapt and respond very quickly to constantly changing environment. Accordingly, they have to make frequent operational, tactical, as well as strategic decisions that will determine their future and fate. Such decisions require considerable amount of data, information, and knowledge.

#### b. Learning objectives:

- 1. Explain Data Governance policies and resulting operational activities related to data.
- 2. Explain the current regulatory and ethical environments for data management.
- 3. Prepare a proposal to solve a business problem.
- 4. Develop an evidence-based solution business problem.
- 5. Effectively communicate an evidenced-based solution to a business problem.
- c. How will the objectives match the School of Business objectives? This course as part of the Data Analytics area of concentration supports AACSB expectations to provide business majors with data analysis skills and technology agility as required for AACSB Standard 9.

#### d. Evaluation instruments (exams, papers, case analyses, projects, presentations, etc.):

Evaluations Checkpoints Quizzes and Exams Feedback/assessment from client Final project insights and recommendation presentation

#### e. Grading standards:

Α	90% - 100%
В	80% - 90%
С	70% - 80%
D	60% - 70%
F	below 60%

#### 4. Resources

- a. Added course: Yes
- **b.** If No, what course is this replacing: N/A
- c. Type of Course: Required
- d. Has the proposed course been offered as a special topics course? No
- e. Has the proposing faculty member(s) reviewed the catalogue and determined that the proposed course does not duplicate in title and/or content existing courses? Yes
- **f. Reason for this course:** To provide a capstone experience in the Data Analysis major area of concentration where the students perform the end-to-end data analysis process, develop and use the range of knowledge and tools covered in the major area of study and engage in a professional consulting project with a business client and are exposed to real-world company data in a business setting.
- g. What program does it serve? Data Analytics Major Area of Concentration
- h. Textbook: Data Analysis such as: Jablonski and Guagliardo, *Data Analysis Plans: A Blueprint for Success [Using SAS: How to Plan Your First Analytics Project*] and Case Packet including Harvard Business Review's *The Creative Consulting Company*, HBR Business Consulting Projects [approx. title]
- **i.** Library holdings: Not necessary due to the nature of the content of the course, vetted online information is sufficient.
- **j.** Facilities: Computer lab workspace with space for 2 students per workstation and desks in groupings for teams. A possibility of one (up to 5) workstations with 10 Terabyte data storage per workstation, or a 100 Gigabit network connection and cloud computing SaaS contract to support data storage and computing needs of Big Data Analysis to be done for class consulting projects. Also, online access or access in lab to tools provided by Washburn including SAP suite of data analysis tools, ARC-GIS for geographic location analysis, SAS and SPSS statistical applications, Microsoft Office Professional Suite (MS PowerBI, MS Project), text analysis software, network Graph analysis software [such as UCINET, Pathfinder,] and other tools as needed for specific project [seek client funding for added tools or purchase of external data sets for a specific client's project].

# Data Analytics Applied in Practice BU 478 SAMPLE SYLLABUS Day and Time Room

Instructor: Dr. Email: @washburn.edu Office: Henderson Learning Center Phone: 785-670Office Hours:

by appointment

\_\_\_\_\_

#### **Course description**

Students will apply the data analytics process including data discovery, transformation, organization and modeling to a real-world project and effectively communicate the solutions.

**Prerequisites**: DA 358 (Data Methods and Warehousing) and DA 368 (Data Mining and Modeling)

### **Course objectives**

By the end of semester, students are expected to be able to:

- 1. Explain Data Governance policies and resulting operational activities related to data.
- 2. Explain the current regulatory and ethical environment for data management.
- 3. Prepare a proposal to solve a business problem.
- 4. Develop an evidence-based solution business problem.
- 5. Effectively communicate an evidenced-based solution to a business problem.

#### **Readings and Materials**

Reading, online and hands-on assignment materials will either be assigned or made available to the class as the semester progresses.

#### Textbooks

Data Analysis such as: Jablonski and Guagliardo, *Data Analysis Plans: A Blueprint for Success* [*Using SAS: How to Plan Your First Analytics Project*] and Case Packet including Harvard Business Review's *The Creative Consulting Company*, HBR Business Consulting Projects [approx. title]

#### **Course Structure**

The course activities will consist of lectures and hands-on technology lab. The assessment of learning will be based on: quizzes, hands-on technology and homework assignments, and a project that demonstrates the use of analytics to address problems.

#### **Course Evaluations**

Checkpoints/quizzes Final project insights and recommendation presentation Feedback/assessment from client

	DA 478 DRAFT TENTATIVE SCHEDULE*
WEEK	TOPICS/DETAILS
1	Managing and performing on consulting projects Intro and Prerequisite knowledge: Data Analysis exercise Data Governance and Data management
	Data Governance, Data Privacy and Security
	Current Legal, Regulatory and ethical environment
2	Potential Client company presentations: problem statements, data sets and support provided
	Discussion of Client projects, outline possible options
3	"Data Process Chain" Review of Data Analysis Process with students presenting one stage in some depth with an example (from prior course or outside source)
	"Data Process Chain" Data Discovery exercise
4	Critical Thinking
	Logic & problem-solving exercise
5	Checkpoint 1:
	The Data Process Chain PowerBI Workspace
6	New tool selection proposal, training materials available and team's plan for self- education
	Data Sets and structure
7	Checkpoint 2: Problem statements, issue priorities and approaches
	Data Sources: Collection – ethical issues with data collection, PII, and data security
8	Data Sources – exploration, selection, presentation and review
	Checkpoint 3: Data sources gathered, ETL

WEEK	TOPICS/DETAILS
9	Group work
10	Checkpoint 4: Data Analysis – Descriptive and Diagnostic analysis
11	Checkpoint 5: Data Analysis – Predictive or Prescriptive
12	Visualization: Dashboards; Building reports formatting
	Story Telling: Communicating information to stakeholders
13	Checkpoint 6-A: Data Analysis Draft Presentation and Reports
14	Checkpoint 6-A: Data Analysis Presentation and Reports
15	Group Project presentations to clients
15	Group Project feedback and debrief
16	Presentations

\*Tentative and subject to change.

# **New Course Approval Routing Form**

Course Number: DA 358

Course Title: Data Methods and Warehousing

Course Originator:	Pamela	Schmidt
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Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Name (print)	Recommendation	Signature	Date
Faculty	Approved/Not Approved		
Dr. Gail Hoover King .	·	·	<u>.                                    </u>
Dr. Pamela Schmidt .	·	·	<u>.                                    </u>
Dr. Bob Boncella .	·	. <u>.</u>	<u>.                                    </u>
Dr. Rosemary Walker .	·	·	<u></u>
Dr. Akhadian Harnowo .	<u>.                                    </u>	·	<u></u>
·	<u>.                                    </u>	<u> </u>	<u>.                                    </u>
Curriculum Committee Chair			
Dr. Tom Hickman .	. <u></u>	·	<u>.                                    </u>
Faculty Chair			
·	·	·	<u>.                                    </u>
Dean			
Dr. David Sollars .	<u>.                                    </u>	·	<u>.                                    </u>
Other (as necessary)			
	<u>.                                    </u>	·	<u>.                                    </u>

Washburn University School of Business

# **New Course Proposal Form**

Course Originator: Pamela Schmidt

Department (Area): School of Business

#### 1. Proposed Catalog Description

- a. Course number: DA 358
- b. Title: Data Methods and Warehousing
- c. Credits: 3
- d. Prerequisites: DA 348 (Data Discovery and Management)
- e. Description: The student will learn methods to process a variety of data types (unstructured and semi-structured) and use technologies that convert, analyze and store large volumes of data. Unstructured and semi-structured data will be converted into information useful for problem solving.

# 2. Resources (Provided by Administration with Faculty Consultation)

- a. How often offered? At least one semester per academic year most likely Spring semesters
- **b.** Costs implications (faculty/staffing requirements full/part-time, etc.): 1/6 course load. Current faculty may teach the course; technology support will be needed to maintain labs and support students. If new Data Analysis faculty is hired the cost implications are outlined in the Program Pro forma documents.
- c. Academic qualifications required to teach this course: Degree in data intensive technology area including Data Analysis, Data Science, Information Systems, Computer Science or Statistics.
- d. Current faculty that are qualified to teach the course: Pamela Schmidt, Bob Boncella
- e. Anticipated enrollment: 20 students
- **f. Impact on enrollment in other classes:** As this is a required course in the Data Analytics major area of concentration, any impact on other classes would most likely have been seen earlier, as impacted by the prerequisite courses for the data analytics major.
- g. How might the course be expected to increase enrollment? Strong demand in the work force for data analytics talent could a) attract some business professionals seeking to expand their skills in data analysis to seek higher paid career opportunities; b) attract new undergraduate students interested in working in jobs in data analytics and related areas; and c) attract undergraduate students (possibly from computer science, technology administration or business) with interest in technology that is not currently met by SOBU offerings.
- **h.** If enrollment will not increase where will these students come from? This major could attract students in the School of Business and attract a few students from outside the school as a secondary area of emphasis and/or a dual major with any other major in the School of Business.
- i. Signature from Dean's Office \_\_\_\_\_

## 3. Pedagogy

**a.** Academic justification for this course: Business organizations are under pressure to adapt and respond very quickly to constantly changing environments. Accordingly, they have to make frequent operational, tactical, as well as strategic decisions that will determine their future and fate. Such decisions require considerable amount of data, information, and knowledge.

#### b. Learning objectives:

- 1. Utilize alternative technologies for data organization and understand ethical, privacy and security issues regarding use of the data.
- 2. Convert unstructured data into forms useful for solving business problems.
- 3. Compare and contrast big data capture and storage technologies with data warehousing technologies.
- 4. Use several information processing tools and models applicable to business management and decision making.
- 5. Demonstrate ability to write a simple program.
- c. How will the objectives match the School of Business objectives? This course as part of the Data Analytics major area of concentration supports AACSB expectations to provide business majors with data analysis skills, and technology Agility as required for AACSB Standard 9.

#### d. Evaluation instruments (exams, papers, case analyses, projects, presentations, etc.): Evaluations

Homework Projects Exams Final exam

#### e. Grading standards:

А	90% - 100%
В	80% - 90%
С	70% - 80%
D	60% - 70%
F	below 60%

#### 4. Resources

- a. Added course: Yes
- **b.** If No, what course is this replacing: N/A
- c. Type of Course: Required
- d. Has the proposed course been offered as a special topics course? No
- e. Has the proposing faculty member(s) reviewed the catalogue and determined that the proposed course does not duplicate in title and/or content existing courses? Yes
- **f. Reason for this course:** The course is one of the four courses for the Data Analytics Major Area of Concentration.
- g. What program does it serve? Data Analytics Major Area of Concentration
- h. Textbook: Proposed course texts under consideration:

Concepts of Database Management, 9th Edition
 By Joy L. Starks | Philip J. Pratt | Mary Z. Last
 Cengage: Copyright 2019, Published
 MindTap for Concepts of Database Management 6 Mo.
 <a href="https://www.cengage.com/c/concepts-of-database-management-9e-starks/#">https://www.cengage.com/c/concepts-of-database-management-9e-starks/#</a>

2) Fundamentals of Python: Data Structures, 2nd Edition, by Kenneth Lambert (Cengage, 2019) ISBN-10: 0357421795 ISBN-13: 9780357421796 https://www.cengage.com/c/fundamentals-of-python-data-structures-2e-lambert/ or MindTap for Cengage's Python Fundamentals, 1st Edition Cengage: Copyright 2021, Available January 2020 Starting At \$100.00 https://www.cengage.com/c/mindtap-for-cengage-s-python-fundamentals-1ecengage/9780357421796/

- **i.** Other required/recommended materials: Python programming language and huge data sets via Univ. of Arkansas Enterprise Systems website [free to academics and students].
- **j.** Library holdings: Not necessary due to the nature of the content of the course, vetted online information is sufficient.
- **k.** Facilities: Use of computer labs or use of a personal Windows PC (recent hardware from 2018 or newer) with WINDOWS 10 operating system. Python programming language support, Microsoft SQL database, HANA in-memory computing through SAP University Alliance.

# Data Methods and Warehousing BU 358 SAMPLE SYLLABUS Day and Time Room

Instructor: Dr. Email: @washburn.edu Office: Henderson Learning Center Phone: 785-670**Office Hours**: by appointment

\_\_\_\_\_

#### **Course description**

The student will learn methods to process a variety of data types (unstructured and semistructured) and use technologies that convert, analyze and store large volumes of data. Unstructured and semi-structured data will be converted into information useful for problem solving.

Prerequisites: DA 348 Data Discovery and Management

### **Course objectives**

By the end of semester, students are expected to be able to:

- 1. Utilize alternative technologies for data organization and understand ethical, privacy and security issues regarding use of the data.
- 2. Convert unstructured data into forms useful for solving business problems.
- 3. Compare and contrast big data capture and storage technologies with data warehousing technologies
- 4. Use several information processing tools and models applicable to business management and decision making.
- 5. Demonstrate ability to write a simple program.

# **Readings and Materials**

Reading materials either will be assigned or made available to the class as the semester progresses.

# Textbooks

Concepts of Database Management, 9th Edition
 By Joy L. Starks | Philip J. Pratt | Mary Z. Last
 Cengage: Copyright 2019, Published
 MindTap for Concepts of Database Management 6 Mo.
 <a href="https://www.cengage.com/c/concepts-of-database-management-9e-starks/#">https://www.cengage.com/c/concepts-of-database-management-9e-starks/#</a>

2) *Fundamentals of Python: Data Structures,* 2nd Edition, by Kenneth Lambert (Cengage, 2019)

ISBN-10: 0357421795 ISBN-13: 9780357421796 https://www.cengage.com/c/fundamentals-of-python-data-structures-2elambert/

or

*MindTap for Cengage's Python Fundamentals*, 1st Edition Cengage: Copyright 2021, Available January 2020 <u>https://www.cengage.com/c/mindtap-for-cengage-s-python-fundamentals-1e-cengage/9780357421796/</u>

## **Course Structure**

Most classes will be a combination of *lecture, discussion* and *lab activities* devoted to data analytics. *Lectures* are intended to integrate concepts <u>you have already read</u> in the assigned readings. *Discussion* is an important part of the learning process, and students <u>are expected to participate actively in class</u>. Many outside assignments will be hands-on using the technology and are required for success in the class. Students should be <u>self-sufficient</u> in <u>overcoming barriers</u> encountered with technology, should <u>independently seek resources</u> to answer their questions and should <u>support each other</u> in solving technology problems.

#### **Course Evaluations**

A total of 1000 points will be available for students. These points are available throughout the semester and can be earned as follows:

Evaluations	Points	Notes
4 Home works	200	@50 points each
2 Projects	250	@125 points each
2 Mid Exams	300	@150 points each
Final exam	250	
Total	1000	-
Class participation (extra)	25	

DA 358 DRAFT TENTATIVE SCHEDULE*			
Week	Торіс	Details	
1	Overview of Data methods, programing and datamining	How Data Analytics are performed using scripts, programming with the key role of data management and storage. Review of IMPACT Cycle.	
2	Data Formats	Survey of Data types and formats-focus on unstructured and semi-structured data types. Methods fitted to handling different data types.	

3	Data Storage Alternatives	Data storage including Data warehouses, Data marts, HADOOP storage for Big Data, HANA in- memory computing,
4	SQL for Data management	Introduce Structured Query Language (SQL) for data management and database interactions.
5	SQL for conversions	SQL for Semi-structured Data conversion and processing, HADOOP
6	SQL for Data Queries and calculations	SQL used for Extraction, Transformation, and Loading (ETL) to load data into a Database
7	SQL for Data Summary and reporting	SQL used for filtering, calculating, summarization and combining data
8	Textual Analysis	Text analysis of unstructured content (from social media, web data)
9	A/V Media Data	Profiling, Data processing issues with Media (video, audio, image)
10	Programming Concepts	Intro to Programming Concepts, fundamentals
11	Programming	Programming for data management and transformation
12	Programming	Programming for competition and analysis
13	Programming Reports	Programming: Generating summary reports
14	Semi-Structured Data	Unstructured Data collection, storage, conversion and processing, HADOOP
15	Data Governance	Data Governance, Ethics, Privacy and Security, Team case study(ies)
16	FINAL EXAM	

\*Tentative and subject to change.

# New Course Approval Routing Form

Course Number DA 368

Course Title: Data Mining and Modeling

Course Originator: Bob Boncella

Signature: \_\_\_\_\_

Date:

Name (print)	Recommendation	Signature	Date
Faculty	Approved/Not Approved		
Dr. Gail Hoover King .	· <u> </u>	<u>.                                    </u>	<u>.                                    </u>
Dr. Pamela Schmidt .	·	<u>.                                    </u>	<u></u>
Dr. Bob Boncella .	. <u>.</u>	<u>.                                    </u>	<u>.                                    </u>
Dr. Rosemary Walker .	·	. <u></u>	<u></u>
Dr. Akhadian Harnowo .	·	. <u></u>	<u></u>
·	<u>.                                    </u>	. <u></u>	<u></u>
Curriculum Committee Chair			
Dr. 10m Hickman .	·	<u>.                                    </u>	<u>· · ·</u>
Faculty Chair			
·	·	·	<u></u>
Dean			
Dr. David Sollars .	<u>.                                    </u>	<u>.                                    </u>	<u>.                                    </u>
Other (as necessary)			
·	· <u> </u>	··	<u>·</u>

Washburn University School of Business

# **New Course Proposal Form**

Course Originator: Bob Boncella

Department (Area): School of Business

#### 1. Proposed Catalog Description

- a. Course number: DA 368
- b. Title: Data Mining and Modeling
- c. Credits: 3
- d. Prerequisites: DA 348 (Data Discovery and Management)
- e. **Description:** The student will learn technologies that can be used to discover relationships among data. These relations can be used to create models used to predict or classify new data.

## 2. Resources (Provided by Administration with Faculty Consultation)

- a. How often offered? At least one semester per academic year most likely Fall semester
- **b.** Costs implications (faculty/staffing requirements full/part-time, etc.): 1/6 course load for faculty teaching, data analytics software and data sources
- c. Academic qualifications required to teach this course: Degree in the area of data analysis or data science, Information Systems or Computer Science, with skills in statistical analysis and knowledge of the methodology and technology used to carry out descriptive analytics, predictive analytics, and prescriptive analytics supporting the management decision-making process.
- **d.** Current faculty that are qualified to teach the course: Dr. Rosemary Walker, Dr. Akhadian Harnowo, Dr. Bob Boncella
- e. Anticipated enrollment: 20 students
- **f. Impact on enrollment in other classes:** As this is a required course in the Data Analytics major area of concentration, any impact on other classes would most likely have been seen earlier, as impacted by the prerequisite courses for the data analytics major.
- **g.** How might the course be expected to increase enrollment? Strong demand in the work force for data analytics talent could a) attract some business professionals seeking to expand their skills in data analysis to seek higher paid career opportunities; b) attract new undergraduate students interested in working in jobs in data analytics and related areas; and c) attract savvy undergraduate students (possibly from computer science, technology administration or business) with interest in technology that is not currently met by SOBU offerings.
- **h.** If enrollment will not increase where will these students come from? This major could attract students in the School of Business, attract a few students from outside the school as a secondary area of emphasis and/or a dual major with any other major in the School of Business.
- i. Signature from Dean's Office \_\_\_\_\_\_

#### 3. Pedagogy

**a.** Academic justification for this course: Business organizations are under pressure to adapt and respond very quickly to constantly changing environments. Accordingly, they have to make frequent operational, tactical, as well as strategic decisions that will determine their future and fate. Such decisions require considerable amount of data, information, and knowledge.

#### b. Learning objectives:

- 1. Explain the different methods and techniques for analyzing data
- 2. Identify the appropriate modeling and analysis tools
- 3. Use analytical methods to discover relationships among data
- 4. Create classification and predictive models
- 5. Create models used for data analysis
- **c.** How will the objectives match the School of Business objectives? This course as part of the Data Analytics area of concentration supports AACSB expectations to provide business majors with data analysis skills and technology agility as required for AACSB Standard 9.

## d. Evaluation instruments (exams, papers, case analyses, projects, presentations, etc):

Evaluations Homework	e.	Grading sta	ndards:
Projects/Case Study Exams		A B	90% -100% 80% - 90%
		D	70% - 80%
		D	60% - 70%

F below 60%

#### 4. Resources

- a. Added course: Yes
- **b.** If No, what course is this replacing: N/A
- c. Type of Course: Required
- **d.** Has the proposed course been offered as a special topics course? No. However, courses with some similar learning objectives have been offered as special topics. About 80% of course material is similar.

BU 403 Essentials of Business Data Analytics Spring 2018 – enrollment 5 BU 403 Essentials of Business Data Analytics Spring 2019 – enrollment 8

- e. Has the proposing faculty member(s) reviewed the catalogue and determined that the proposed course does not duplicate in title and/or content existing courses? Yes
- **f. Reason for this course:** The course is one of the four courses for the Data Analytics Major Area of Concentration.
- g. What program does it serve? Data Analytics Major Area of Concentration
- h. Textbook: Similar to Essentials of Business Analytics 2<sup>nd</sup>
- i. Other required/recommended materials: None
- **j.** Library holdings: Not necessary due to the nature of the content of the course, vetted online information is sufficient.
- **k.** Facilities: computer lab and equipment necessary to run the appropriate Data Analytic tools (e.g., Power BI, Analytic Solver, SPSS, SAP, et al.)

## Data Mining and Modeling DA 368 SAMPLE SYLLABUS Day and Time Room

Instructor: Dr. Email: @washburn.edu Office: Henderson Learning Center Phone: 785-670Office Hours:

by appointment

\_\_\_\_\_

#### **Course description**

The student will learn technologies that can be used to discover relationships among data. These relations can be used to create models used to predict or classify new data.

Prerequisites: DA 348 Data Discovery and Management

#### **Course objectives**

By the end of semester, students are expected to be able to:

- 1. Explain the different methods and techniques for analyzing data
- 2. Identify the appropriate modeling and analysis tools
- 3. Use analytical methods to discover relationships among data
- 4. Create classification and predictive models
- 5. Create models for data analysis

#### **Readings and Materials**

Reading materials either will be assigned or made available to the class as the semester progresses.

#### Textbook Similar to:

Essentials of Business Analytics 2<sup>nd</sup>

#### **Course Structure**

The course will consist of lectures over business data analytics topics and discussion/problem sessions based on pre-chapter and post-chapter case studies.

#### **Course Evaluation**

The assessment will be based on two exams, homework exercises, & projects.

25% Homework & Case Problems 25% Mid-term Exam 50% Final Exam

DA 368 DRAFT TENTATIVE SCHEDULE*			
Week	Topics/Details		
Week 1	Introduction Data modeling and mining		
Week 2			
Week 3	Data Models using technology Descriptive Statistics		
Week 4			
Week 5			
Week 6	- Data Visualization		
Week 7	Midterm Exam		
Week 8	Descriptive Data Mining		
Week 9			
Week 10	- Linear Regression		
Week 11			
Week 12	<ul> <li>Predictive Data Mining</li> </ul>		
Week 13	Probability: An Introduction to Modeling Uncertainty		
Week 14	Decision Analysis		
Week 15	Statistical Inference		
Week 16	Final		

\*Tentative and subject to change

# **New Course Approval Routing Form**

Course Number: DA 348

Course Title: Data Discovery and Management

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Name (print)	Recommendation	Signature	Date
Faculty	Approved/Not Approved		
Dr. Gail Hoover King .	·	<u>.                                    </u>	·
Dr. Pamela Schmidt .	. <u>.</u>	<u>.                                    </u>	·
Dr. Bob Boncella .	. <u>.</u>	<u>.                                    </u>	·
Dr. Rosemary Walker .	. <u>.</u>	<u>.                                    </u>	<u>.                                    </u>
Dr. Akhadian Harnowo .	. <u> </u>	<u>.                                    </u>	<u>.                                    </u>
·	<u> </u>	<u>.                                    </u>	<u>.                                    </u>
Curriculum Committee Chair			
Dr. Tom Hickman .	·	<u>.                                    </u>	· <u>·</u>
Faculty Chair			
·	. <u></u>	<u>.                                    </u>	·
Dean			
Dr. David Sollars .	<u>.                                    </u>	<u>.                                    </u>	<u>.                                    </u>
Other (as necessary)			
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Washburn University School of Business

# New Course Proposal Form

Course Originator: Akhadian Harnowo

Department (Area): School of Business

## 1. Proposed Catalog Description

- **a.** Course number: DA 348
- **b.** Title: Data Discovery and Management
- c. Credits: 3
- d. Prerequisites: CM 105 or CM 111, EC211, BU248, BU250
- e. Description: In this course, students will identify and manipulate data that will provide actionable information to solve business problems.

## 2. Resources (Provided by Administration with Faculty Consultation)

- a. How often offered? Two times per year Fall and Spring Semesters
- **b.** Costs implications (faculty/staffing requirements full/part-time, etc.): 2/6 full time faculty load. Current faculty will teach the course; technology support will be needed to maintain labs and support students.

NOTE: To implement this course and other courses in Data Analytics successfully, a Data Analysis Administration Specialist from IT Department is needed for curriculum and technical support to install, administer and maintain the technologies, systems and data sets.

- c. Academic qualifications required to teach this course: Degree in the area of data analysis or data science, Information Systems or Computer Science, with skills in data sources supporting the management decision-making process and knowledge of ETL techniques and software.
- **d.** Current faculty that are qualified to teach the course: Akhadian Harnowo, Pamela Schmidt, Rosemary Walker
- e. Anticipated enrollment: 20 students
- **f. Impact on enrollment in other classes:** This is the first required course in the Data Analytics major area of concentration. The new major area of concentration is expected to attract students to Washburn University. In addition, the course may also draw students wanting a second major area of concentration.
- **g.** How might the course be expected to increase enrollment? Strong demand in the work force for data analytics talent could a) attract some business professionals seeking to expand their skills in data analysis to seek higher paid career opportunities; b) attract new undergraduate students interested in working in jobs in data analytics and related areas; and c) attract undergraduate students (possibly from computer science, technology administration or business) with interest in technology that is not currently met by SOBU offerings.
- **h.** If enrollment will not increase where will these students come from? This major could attract students in the School of Business and attract a few students from outside the school as a secondary area of emphasis and/or a dual major with any other major in the School of Business.
- i. Signature from Dean's Office

### 3. Pedagogy

**a.** Academic justification for this course: Business organizations are under pressure to adapt and respond very quickly to constantly changing environments. Accordingly, they have to make frequent operational, tactical, as well as strategic decisions that will determine their future and fate. Such decisions require considerable amount of data, information, and knowledge.

#### b. Learning objectives:

- 1. Find sources of data
- 2. Identify file types and data formats used for solving business problems
- 3. Demonstrate different methods for data collection
- 4. Prepare data (Extract, Transform, and Load) for analysis purposes
- 5. Demonstrate methods that transform different types of data into useful/actionable information
- 6. Identify legal, ethical and secure means for managing data
- c. How will the objectives match the School of Business objectives? This course as part of the Data Analytics major area of concentration supports AACSB by providing business majors with data analysis skills and technology agility as required for AACSB Standard 9.
- **d.** Evaluation instruments (exams, papers, case analyses, projects, presentations, etc.): Evaluation based on:
  - Homework Projects Exams Final exam

#### e. Grading standards:

Α	90% -100%
В	80% - 90%
С	70% - 80%
D	60% - 70%
F	below 60%

#### 4. Resources

- a. Added course: Yes
- **b.** If No, what course is this replacing: N/A
- c. Type of Course: Required
- d. Has the proposed course been offered as a special topics course? No
- e. Has the proposing faculty member(s) reviewed the catalogue and determined that the proposed course does not duplicate in title and/or content existing courses? Yes
- **f. Reason for this course:** This course is the first course in the Data Analytics Major Area of Concentration. In this course, students will identify and manipulate data that will provide actionable information to solve business problems.
- g. What program does it serve? Data Analytics Major Area of Concentration
- h. Textbook: Books similar to the following: Sharda, R., Delen, D., Turban, E., 2015. Analytics, Data Science, & Artificial Intelligence. 11<sup>th</sup> edition. Hoboken, NJ: Pearson Education. ISBN: 978-0-13-519201-6
- i. Other required/recommended materials: None
- **j.** Library holdings: Not necessary due to the nature of the content of the course, vetted online information is sufficient.
- **k.** Facilities: Computer labs, access to technology, data sets, online homework management system, online resources (e.g. textbook, videos), data analytics tools (e.g. Excel, Power BI, et al.)

## Data Discovery and Management DA 348 SAMPLE SYLLABUS Day and Time Room

Instructor: Dr. Email: @washburn.edu Office: Henderson Learning Center Phone: 785-670Office Hours:

by appointment

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#### **Course description**

In this course, students will identify and manipulate data that will provide actionable information to solve business problems.

Prerequisites: CM 105 or CM 111, EC211, BU248, BU250

#### **Course objectives**

By the end of semester, students are expected to be able to:

- 1. Find sources of data
- 2. Identify files types and data formats used for solving business problems
- 3. Demonstrate different methods for data collection
- 4. Prepare data (Extract, Transform, and Load) for analysis purposes
- 5. Demonstrate methods that transform different types of data into useful/actionable information
- 6. Identify legal, ethical and secure means for managing data

#### **Readings and Materials**

Reading materials either will be assigned or made available to the class as the semester progresses.

#### Textbooks Similar to:

 Sharda, R., Delen, D., Turban, E., 2015. Analytics, Data Science, & Artificial Intelligence. 11<sup>th</sup> edition. Hoboken, NJ: Pearson Education. ISBN: 978-0-13-519201-6

#### **Course Structure**

Most classes will be a combination of lecture, discussion and lab activities devoted to data analytics. Lectures are intended to integrate concepts <u>you have already read</u> in the assigned readings. Discussion is an important part of the learning process, and students <u>are expected to participate actively in class</u>.

## **Course Evaluations**

A total of 1000 points will be available for students. These points are available throughout the semester and can be earned as follows:

Evaluations	Points	Notes
2 Home works	200	@100 points each
2 Projects	250	@125 points each
2 Mid Exams	300	@150 points each
Final exam	250	
Total	1000	
Class participation (extra)	25	

DA 348 DRAFT TENTATIVE SCHEDULE*			
Week	Торіс	Details	
1	Intro to Data Analytics	How Data Analytics Affects Business, The Data Analytics Process Using the IMPACT Cycle,	
2	Data Mining	Nature of Data, data discovery	
3	Data Mining	Data discovery, data collection	
4	Data Mining	Data discovery, data collection	
5	Data Preparation dealing with Gaps, corrupt, outliers and Cleaning	Structured Data, Relational Database, Data Dictionaries	
6	Data Preparation and Cleaning	Extraction, Transformation, and Loading (ETL) of Data	
7	Data Preparation and Cleaning	Extraction, Transformation, and Loading (ETL) of Data	
8	Modeling and Evaluation	Profiling, Descriptive stats, Data reduction, regression	
9	Modeling and Evaluation	Profiling, Descriptive stats, Data reduction, regression	
10	Modeling and Evaluation	Profiling, Descriptive stats, Data reduction, regression,	
11	Visualization	Using Visualizations and Summaries to Share Results with Stakeholders	
12	Visualization	Using Visualizations and Summaries to Share Results with Stakeholders	

13	Visualization	Charts, tools, communication
14	Key Performance Indicators	Generating KPI to answer business questions
15	Ethics	Caveats of Analytics and AI Implementation Issues: From Ethics and Privacy to Organizational and Societal Impacts
16	FINAL EXAM	

\*Tentative and subject to change.

#### FACULTY AGENDA ITEM

Date: 10 February 2020

Submitted by: Tom Prasch (ext. 1892) on behalf of Faculty Affairs Committee

SUBJECT: Washburn policy on children in the workplace

Description: The Faculty Senate calls on the VPAA to establish a committee to examine Washburn policies on children in the workplace and related issues. The committee should be constituted to include representatives of faculty (not necessarily members of Faculty Senate), administration, and students as well as university legal counsel. Issues to be reviewed by the committee should include:

- 1) Washburn policies on children on campus;
- 2) Policies on children at other colleges and universities;
- 3) Exploring the possibility of self-funded on-campus childcare;
- 4) Alternative mechanisms to enhance flexibility for faculty with small children (e.g., parental leave, flexibility of work assignments, suspension of tenure calendar, etc.);
- 5) Whether changed policies can or should apply to all or some staff and students;
- 6) Gauge faculty support for existing policies.

Rationale: See attached

Financial Implications: None for the committee

Proposed Effective Date: As soon as it can be arranged

Request for Action: Approval by Faculty Senate, action by VPAA

Approved by: AAC on date

FAC on date 9/23/2019

Faculty Senate on date

Attachments Yes X No D

#### Rationale

#### Current policy on children in the workplace, as it appears in the WUPRPM section on "Employee

and Labor Relations," reads as follows (7.3 of particular importance for our purposes):

7. Children in the Workplace.

7.1 Principles to Follow. When children are present in the workplace the following principles shall be followed:
 •The parent is solely responsible for the child at all times. The parent shall accompany the child at all

times and shall not ask nor permit any other Employee, Student or other person to supervise a child;

•The presence of the child may not disrupt the work environment or negatively affect the productivity of the Employee, other Employees, or Students;

•The Employee's supervisor may ask the Employee to remove the child from the workplace at any time; and,

•A child with an illness preventing the child from being accepted by a regular day care provider or from attending school, shall not be brought to the workplace under any circumstances.

7.2 Visits Allowed. Brief, non-recurring and infrequent visits by children of Employees shall be permitted.

7.3 Visits Not Allowed. The frequent, regular, or extended presence of a child or children during work hours shall not be allowed for reasons including, but not limited to:

•The potential for interruption of the Employee's work;

•Health and safety issues for the Students, Employees and child(ren); and,

•Liability to the University.

7.4 **Cooperation with Employees**. Departments, when workload permits, shall cooperate with an Employee in the use of breaks, meal periods and leave for addressing family responsibilities.<sup>1</sup>

This has been the basic policy for decades; through the course of those decades, it has been

repeatedly challenged, often ignored, and irregularly enforced. And yet the workforce has changed significantly over the course of those decades, as have our expectations and understandings of gender dynamics. Most centrally, women, who still carry the greatest burden for childcare in American society, also have a significantly larger place in faculty and among new faculty hires than they did when this policy was established; at the same time, expectations for men's role in childrearing have increased. The unequal burdens of childcare mean that the existing policy creates a fundamental gender inequity; the greater role of men in childcare means any revision of policy should aim for gender neutrality. Current policies are likely to significantly impact Washburn's ability to retain and recruit new faculty, especially

women. Current policies, as studies have repeatedly shown, differentially impact women's professional development.<sup>2</sup>

During the decades this policy has remained in place, trends in the workplace outside of academe have changed dramatically, moving toward greater accommodations for children in the workplace and workplace-sponsored childcare. In Kansas, for example, changes in such policies were initiated in state offices by Kathleen Sibelius in 1996 during her tenure as Insurance Commissioner,<sup>3</sup> and recently the Kansas legislature changed its rules to allow breastfeeding by legislators on the House floor.<sup>4</sup> Private organizations and companies have begun to follow the state's lead on such policies. The advocacy group Parenting in the Workplace Institute provides on their website both a database for "child-inclusive organizations" and a template for policies.<sup>5</sup>

As long ago as 2005, Linda Kerber, in her essay "We Must Make the Academic Workplace More Humane and Equitable" (and, by the way, we still must), wrote: "Academic institutions have been especially hapless in reforming policies on pregnancy and related infant and child care."<sup>6</sup> That assertion seems broadly still true today. Washburn is hardly alone in its failure to revise such standards. University of Kansas standards are practically identical<sup>7</sup>; Allen County Community College (which classifies children with "pets") is not much different.<sup>1</sup> Wichita State, while less direct in its language, still has a policy shaped toward exception and exclusion of children, emphasizing: "When work obligations allow, the University encourages Leadership to support Employees who wish to meet family responsibilities by using breaks or lunch hours, flexible work schedules, adjusted hours or vacation leave for this purpose."<sup>8</sup> As Megan Zahneis points out, in her recent article "When Colleges Frown on Kids on Campus—or Even Ban Them,"<sup>9</sup> colleges like Lafayette College (PA), Northern Kentucky University, and Tennessee State University prohibit children on campus, and others constrain such presence severely. But, as Zahneis also notes, the push against such restrictions is also growing in strength. The push has been, broadly, towards more family-friendly policies, and toward something Kerber had underlined back in 2005: "flexibility." By creating a committee to come to terms with the range of issues this presents, Washburn may not be leading the way, but it can at least ride the tide.

The issues that such a committee should address include, but should not be limited to:

1) The core policy restricting routine presence of children on campus;

2) Policies on children at other colleges and universities;

3) Provision of childcare on campus (at present a matter of subsidized outsourcing);

4) Flexibility of work assignments, including the possibility of parental leave, and including procedures

that currently exist as possibilities but are not articulated as policy (such as flexible work assignments

that allow for, for example, a semester of all on-line assignments, or the suspension of tenure calendar

countdowns for faculty with new children);

5) Whether any revised policies could or should apply to some or all of staff and students;

6) Providing an opportunity for those opposed to such changes to articulate their position.

<sup>&</sup>lt;sup>1</sup> https://www.washburn.edu/faculty-staff/human-resources/wuprpm/WUPRPM-Procedures-and-Regs/F.%20EmployeeLaborRelationsReg.pdf

<sup>&</sup>lt;sup>2</sup> See, for example, Mary Ann Mason and Marc Goulden, "Do Babies Matter (part II)?," *Academe*, Nov.-Dec. 2004, 11-14.

<sup>&</sup>lt;sup>3</sup> See Kathleen Knot, "Babies head to work with their parents," Kansas City Star, 5 July 2016.

<sup>&</sup>lt;sup>4</sup> Jonathan Shorman, "Kansas legislators can breastfeed their babies on the House floor," *Wichita Eagle*, 22 January 2019. The article notes the Kansas Senate had changed its rules to allow children under one year old and breastfeeding on the floor in 2018.

<sup>&</sup>lt;sup>5</sup> See <u>https://www.babiesatwork.org/</u>.

<sup>&</sup>lt;sup>6</sup> Chronicle of Higher Education, March 18, 2005.

<sup>&</sup>lt;sup>7</sup> http://policy.ku.edu/human-resources/children-in-workplace

<sup>&</sup>lt;sup>8</sup> https://www.wichita.edu/about/policy/ch\_03/ch3\_60.php

<sup>&</sup>lt;sup>9</sup> Chronicle of Higher Education, 9 January 2020.

#### Course Modalities (Draft 11/25/2019)

These expectations are limited to the teaching aspects of faculty responsibilities.

Common to all teaching modalities are the following expectations: Faculty are expected to dedicate adequate time to their courses as to organize their courses; prepare all lectures, activities, and assignments in accordance with accreditation standards regarding instructional and non-instructional time; hold office hours in accordance with their unit's requirements; respond to student communications promptly; evaluate student work and provide feedback in a timely manner; and complete administrative tasks relevant to their courses. Faculty should include office hours or scheduled meeting times and contact information in their syllabi. Email communication should be through Washburn email addresses. Learning-management systems are determined by the dean of the unit or the VPAA.

Course modalities are determined by the department chair and/or dean of the unit. Changes or adjustments to the modality must be approved by the department chair and/or dean of the unit.

## **Face-to-Face**

Face-to-Face courses have required classroom attendance and meet on a regularly scheduled basis, generally fifty minutes a week per credit hour in a fifteen-week semester or the same total of instructional time per credit hour over a different period, based on Higher Learning Commission minimum standards. Higher Learning Commission guidelines require a minimum of 750 minutes of instructional time and 1500 minutes of non-instructional time for each credit hour in a Face-to-Face course. No more than 10% of meeting time will be replaced with online activities in a Face-to-Face course.

## Online

Online courses are conducted via internet-based instruction and collaboration. Some courses may require minimal campus attendance or in-person/proctored examinations, but no more than 10% of course content and examination hours will be delivered in-person in an Online course. Online courses are designed such that they can be completed by the student at a distance. The content of Online courses requires at minimum as much instructional and non-instructional time as a Face-to-Face course (2250 minutes per credit hour), in accordance with accreditation standards.

## **Mixed Mode**

Mixed Mode courses include both required classroom attendance and online instruction. Classes have substantial activity conducted online, which substitutes for some classroom meetings. The content of Mixed Mode courses requires at minimum as much instructional and non-instructional time as a Face-to-Face course (2250 minutes per credit hour), in accordance with accreditation standards. The percentage of online versus face-to-face time in a Mixed Mode course must be approved by a departmental chair or unit dean.

Note: Discipline-specific accreditation organizations may have expectations regarding credit hours greater than those of the Higher Learning Commission. Faculty members are expected to be aware of and observe the accreditation standards relevant to their discipline.



STAR End of Term Report Fall 2018

Drew P. Burks, Ph.D. STAR Program Coordinator January 2, 2019

## PART 1: FALL 2018

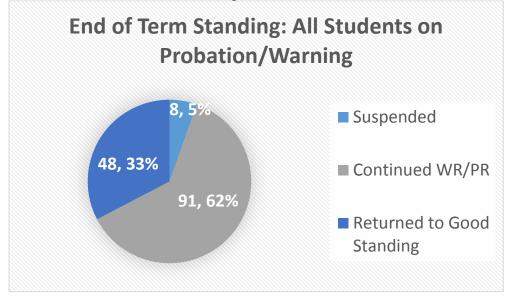
## **Student Participation**

Between August 18 and December 14, 194 students were eligible to participate in the STAR Program based on their GPA and attempted hours. Of these, 147 students persisted to the end of the term on Academic Warning or Probation.

Among those who persisted, 94 students (64%) participated in the STAR program. I have defined "participants" as students who met with me or a member of the Center for Student Success or attended STAR programing at least once, and "active participants" as students who met with me or another member of the CSSR three or more times (47 students). Of those that were active, 28 students met with CSSR staff 5 or more times. This represents a 10% increase in the number of students that attended 5 or more meetings from the Spring 2018 semester. This is due in large part to the use of the scheduling and reminder capabilities within the EAB Navigate software, which Washburn began using this semester.

## End of Term Standing

Among all students on Academic Warning or Probation (including STAR non-participants), 32.6%, or 48 students, returned to Good Academic Standing after the Spring semester. The Suspension Committee only separated 8 students from the university, and 91 students (62%) remained on Continued Probation or Warning.



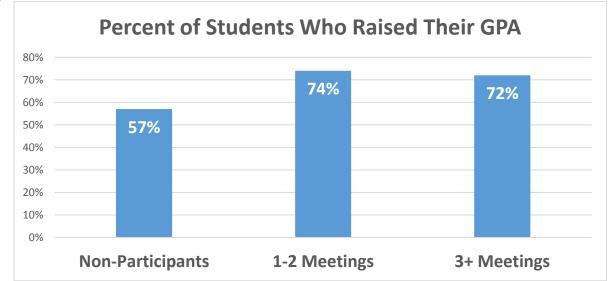
Amongst STAR participants, 31 (33%) returned to Good Standing. While these numbers are roughly the same as the overall percentages of students on Academic Warning or Probation returning to good standing, the impact of the STAR Program can be felt more in the area od GPA increases.

## **Increases in Student GPAs**

Because many students come to the STAR Program with GPAs that cannot be repaired in one semester, return to Good Standing should not be the only measure of success. Rather, students' ability to improve their GPA, and the rate of improvement, should also be considered.

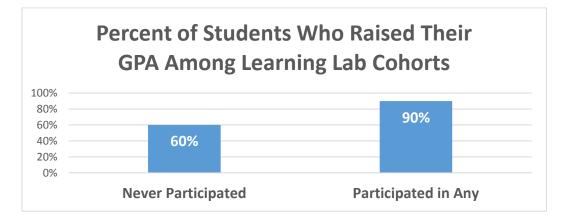
This semester, students who participated in STAR were 15% more likely than non-participants to raise their GPA. Among active participants (students who met with me 3 or more times) 72% raised their GPA, and 73% of students who attended 1-2 meetings improved their GPA.

Compare these results to students on Academic Warning or Probation who did <u>not</u> participate in the STAR program: *only 57% of them were able to raise their GPA on their own, and 35% saw further decreases in their GPA*.



In the Spring 2017 semester, the STAR Program added another layer of academic support for students on Probation called Learning Labs. These weekly workshops/ study halls help students build the skills they need to succeed in college, and they continue to be highly effective in helping students raise their GPA.

Among students who attended <u>any</u> of the Learning Labs this semester, <u>90%</u> raised their GPA and only two of them saw a decrease, both less than 0.06 points.



During the course of this semester, voluntary study hall hours (using the new EAB system) were instituted as a way for students wishing to improve their GPAs to show effort and to document their time in the library. Of the students eligible for the STAR Program, 30 logged hours in the study hall tracking system. Students that participated in study hall hours in the library were able to raise their GPAs 0.70 points on average. One student completed nearly 30 hours, which is all the more impressive considering he was not a student athlete, and did not have to complete mandatory study hall hours. The use of the study hall hours function in the EAB Navigate system will continue to evolve as a part of the STAR Program in future semesters.

## Average GPA Increase

Not only did STAR participants improve their GPAs, the rate of increase was proportional to their level of participation in the program.

Among STAR participants who attended three or more individual meetings, the average GPA increase was 0.33 points, **more than 10% higher** than all students on Warning or Probation (.21).

The most impressive data came from our Learning Lab cohorts. **Students who attended Learning Labs this semester increased their GPA by an average of 0.76 points**, more than double the average for all students on Warning or Probation.

Average GPA Increase Among Probation/Warning Cohorts 0.33 0.35 0.30 0.21 0.25 0.20 0.14 0.15 0.10 0.01 0.05 0.00 All **3+ Meetings 1-2 Meetings Non-Participants Probation/Warning** 

This semester provided further evidence that non-participants, as a whole, <u>do not</u> significantly increase their GPAs. *The average GPA decrease among non-participants was 0.01 points.* 

## Summary of Fall 2018 Results

The success of the STAR Program is measured by the overall student participation rate, the number of students who returned to Good Standing, and students' average GPA increase. Our rate of participation for the Fall 2018 term was 64%. **STAR returned 33% of its participants to Good Standing and helped 72% of them raise their GPA**. Among students who fully completed the program (attending 3 or more individual meetings), students on Academic Warning raised their GPA 0.13 points, and students on Academic Probation increased their GPA by 0.50 points. Students in the lowest academic standing category (on academic probation and subject to immediate dismissal, below a 1.00 GPA) increased their overall GPA an (astounding) average of **1.32 points**!

This provides further evidence that the interventions of the STAR Program are not only effective; they are crucial for helping academically distressed students persist at the university and achieve academic success.

This semester the STAR Program saw a record number of eligible students for a Fall semester and only a slight decrease in participants. The continued overall high number of participants without a proportional increase in resources, however, meant that students were only able to meet with the STAR Coordinator around once a month instead of the consensus best practice of every other week. To address these conditions for our most vulnerable students, those on Probation, we maintained weekly Learning Labs to give them regular contact with the STAR Coordinator. Additionally, as mentioned above, STAR students had the option of participating in study hall hours, which the program coordinator monitored.

This highlights both the innovation of the STAR Program, but also its changing needs in the future. Larger freshmen classes combined with our open access mission means that the number of eligible students and participants in Washburn's STAR Program will only continue to grow.

The use of the EAB Navigate system this semester has decreased the number of missed meetings by STAR participants due to the students' ability to schedule their own meetings and the number of automated reminders the students get prior to the scheduled meeting time. The added efficiency of the EAB scheduling system resulted in a 32% increase in the number of students attending more than 3 scheduled STAR meetings from Spring 2018 to Fall 2018 semesters. Additionally, the added level of feedback provided within the EAB system after quarterly grade checks and whenever an instructor submits an alert also results in a higher level of student awareness of where they stand throughout the semester. While these types of notifications were previously handled through email and by phone by the STAR Program Coordinator, the EAB notifications are less likely to be ignored/deleted by the students receiving them, thus resulting in more awareness. This benefits all students on Academic Warning or Probation, whether or not they choose to participate in the STAR Program, and it streamlines some of the duties of the STAR Program Coordinator.

## PART 2: SEVEN SEMESTER PROGRAM REVIEW

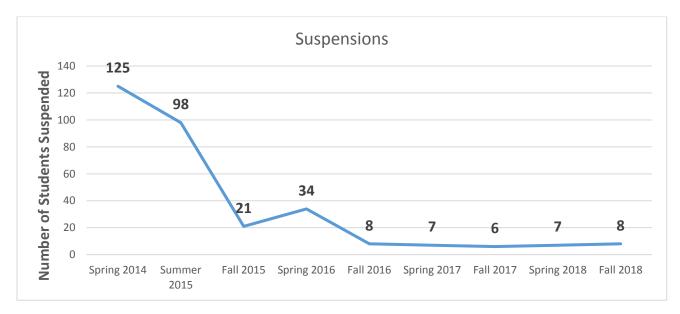
## **Progress Since Fall 2015**

Since its inception after the revision to the Academic Standing Policy in June 2015, STAR has been under the leadership of three different coordinators. Because of inconsistencies in evaluating STAR's results, the best measures to track STAR's progress over time are the number of suspensions, the rate of participation, the number of students STAR is returning to Good Standing, and the percentage of students who increased their GPA.

## Suspension Numbers

The number of suspensions has continued to decline since Spring 2014. That semester, 125 students were separated from the university, or **38.46%** of all students on Academic Warning or Probation.

After the inception of the new academic standing policy in June 2015, suspensions dropped to 21 students at the end of the Fall 2015 semester—the first semester of the STAR Program. Since Spring 2016, these numbers have continued to dramatically decline. This semester, only 8 students were separated from the university, 5% of all students on Academic Warning or Probation.

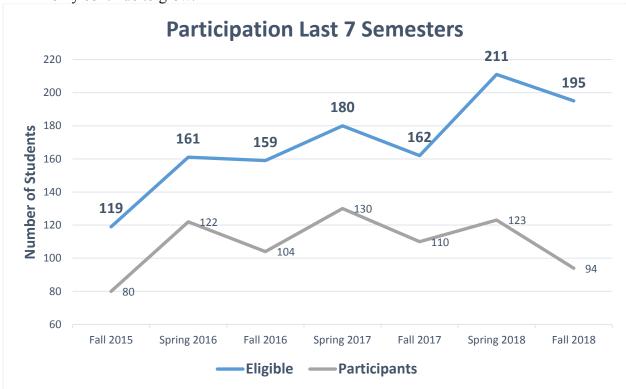


## **Participation Rates**

Participation rates in STAR have held steady around 60-80% for the life of the program. However, several patterns have emerged over the past four semesters.

- 1) First, there are always more students eligible for STAR in the Spring semester, as many first-time freshmen go on Academic Warning or Probation.
- 2) Second, Spring participation is always higher than Fall, perhaps because many of these first-time freshmen are eager to repair their GPAs.

3) Third, the number of eligible participants has **exploded** since the inception of the STAR Program, growing from 119 in Fall 2015 to an all time high for a fall semester of 195 in Fall 2018. **Despite this 64% growth rate, participation rates have not faltered.** 



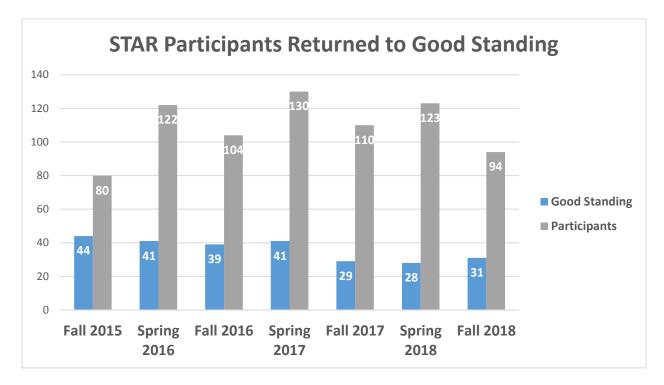
4) Finally, if the past seven semesters are any predictor, the number of eligible students will only continue to grow.

This means that STAR is serving more students than ever without an increase in fiscal or personnel resources.

## Academic Standing

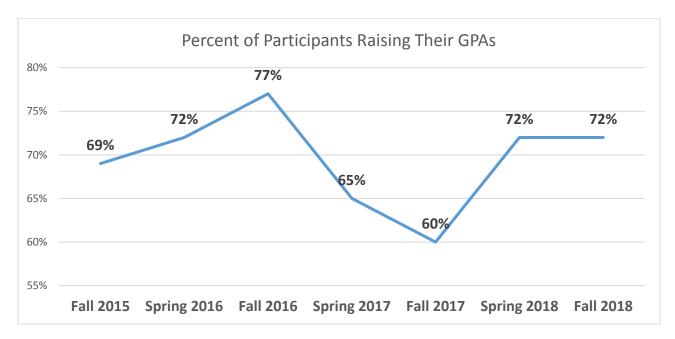
The data from the past four semesters suggests that the STAR Program in its current structure and resources may be running at maximum capacity in terms of the number of students it can serve well.

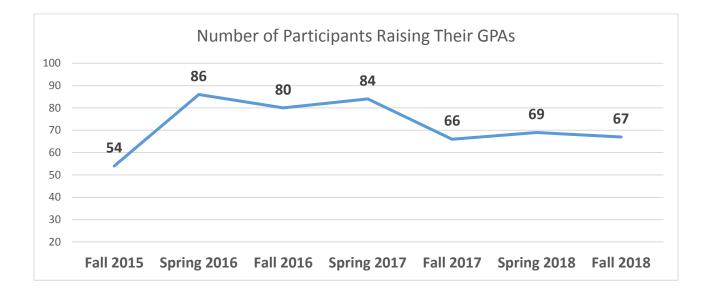
One of the most interesting data trends that has emerged is how many students are returning to Good Academic Standing each semester. Despite the increased number of eligible students and with only a slight decrease in participants in the Fall 2018 term, STAR returned three more participants to Good Standing this semester compared to the Spring 2018 semester. This meant that the proportion of participants who returned to Good Standing has increased slightly after decreasing in both the Fall 2017 and Spring 2018 semesters. The data from the 2015-16 academic year also bears out this trend. Together, the past seven semesters of data suggest that **one Coordinator can only help a maximum of 40 participants return to Good Academic Standing each semester**.



## **GPA** Increase

The percentage of students increasing their GPAs mirrors this pattern. While the proportion of students increasing their GPA in the STAR Program has seen modest growth over the initial three semesters, that proportion shrank across the Spring and Fall 2017 semesters. This semester the percentage of students who raised their GPAs was 72%. However, when measured by the raw number of students increasing their GPAs, those numbers continue to hold steady between 65-80 students. Again, this suggests that one STAR Coordinator can only realistically help between 65 and 80 students increase their GPA each semester.





## Summary

In sum, suspensions have declined to less than 10 per semester, and are holding steady. Our participation rates are holding strong, even while the number of eligible students continues to hit new highs and the number of STAR participants continues to hold steady. Over the last seven terms, STAR has succeeded tremendously in getting more and more students back on track. Without our help, almost 40% of students on Warning or Probation were being suspended before Fall 2015. Further evidence of the efficacy of the STAR Program is that non-participants continue to see GPA declines and get suspended at higher rates.

However, the STAR Program's capacity appears to continue to plateau in terms of the raw number of students that one Coordinator can help. As we anticipate growing numbers of STAR-eligible students in the future, increasing the proportion of students who return to Good Academic Standing and raise their GPA may require additional personnel.