Roseman University of Health Sciences Year Seven Evaluation of Institutional Effectiveness Report

Prepared for the
Northwest Commission on Colleges and Universities
August 31, 2020

Table of Contents

Evaluation of Institutional Effectiveness
List of Appendices

Institutional Overview

Roseman University of Health Sciences was founded in 1999 as the Nevada College of Pharmacy and incorporated in the State of Nevada as a private, non-profit, independent, 501(c)(3) educational institution. Since its inception, Roseman has operated under the authority of its Board of Trustees. It was granted the authority to offer the Doctor of Pharmacy (Pharm.D.) degree by the Nevada Commission on Post-Secondary Education in 2001, and following the graduation of its first class in November 2003, the College of Pharmacy received accreditation from the Accreditation Council for Pharmacy Education in January 2004.

The University's founder and current President Emeritus, Dr. Harry Rosenberg, held the conviction that healthcare education should and could be better, more effective, and capable of producing highly competent graduates, who would be sought after by employers regardless of the job market. The Pharm.D. curriculum designed at the outset (which is still in use today) emphasizes a student-centered, active learning environment where students participate in experiential education from the very beginning of the program. Rather than semesters or quarters, the curriculum is organized into blocks. The single course schedule helps students focus on each individual topic, and also emphasizes active participation in the learning process by incorporating a variety of hands-on activities in addition to the traditional lecture format. These early hands-on practical experiences enhance and support the didactic curriculum by allowing students to see, feel, and understand what is presented in the classroom in a real-life setting. These principles and this system laid the foundation for all subsequent programs and summarize the University's innovative educational philosophy that has now been trademarked as the Roseman Six-Point Mastery Learning Model® https://www.roseman.edu/about-roseman-university/six-point-mastery-learning-model/.

Since the enrollment of 38 students in the Pharm.D. Program in 2001, the University has grown considerably in a relatively short period of time. As of the fall of 2020, total University enrollment will be over 1,400 students and over 6,500 alumni. These students are supported by 135 full-time and more than 100 part-time faculty and over 120 full-time staff from all academic and service units. Roseman offers two doctoral degrees (Doctor of Pharmacy and Doctor of Dental Medicine), two master's (Masters of Science in Nursing (MSN) and Masters of Business Administration (MBA)), one baccalaureate degree (Bachelor of Science in Nursing), and one post-doctoral certificate program (Advanced Education in Orthodontics and Dentofacial Orthopedics (AEODO)). The AEODO program combines the certificate with an MBA. The University is located at two main campus sites, one in Henderson, Nevada and the second, established in 2006, in South Jordan, Utah. The Pharm.D., MBA and BSN degrees are offered at both campuses. The AEODO/MBA program is offered in Nevada and the DMD program is offered in Utah. The MSN program is online.

Since its founding, the University has undergone two name changes. In 2004, the Board of Trustees approved changing the name of the institution from the Nevada College of Pharmacy to the University of Southern Nevada. The name change reflected the need and opportunity for the institution to expand its educational offerings primarily in the health sciences. The name was changed to Roseman University of

Health Sciences, effective July 2011. The Roseman name reflected the University's desire to change to a non-geographic name as it continues to grow and emphasizes its mission in health care education.

As of the Fall of 2020, the University continues to grow and adapt to a rapidly changing environment while enjoying the stable leadership of its founders. Dr. Renee Coffman, who along with Dr. Rosenberg is one of the University's founders, has served as President since December 2012. In response to the aforementioned environment, the University has adopted a new Mission Statement and approved a new Strategic Plan for 2020-2025. This plan includes an implementation component that allows for regular reporting and the opportunity to be tactically flexible while maintaining sight of the high-level goals that underpin assessment of institutional effectiveness. This report will detail recent outcomes for the university as well as how that analysis has led to this current framework for the University's evaluation of institutional effectiveness.

Northwest Commission on Colleges and Universities Basic Institutional Data Form

Information and data provided in the institutional self-evaluation are usually for the academic and fiscal year preceding the year of the evaluation committee visit. The purpose of this form is to provide Commissioners and evaluators with current data for the year of the visit. After the self-evaluation report has been finalized, complete this form to ensure the information is current for the time of the evaluation committee visit. Please provide a completed copy of this form with each copy of the self-evaluation report sent to the Commission office and to each evaluator.

Institutional Information

Name of Institutional
Mailing Address: 11 Sunset Way
Address 2:
City: Henderson
State/Province: Nevada
Zip/Postal Code: 89052
Main Phone Number: 702-968-2020
Country: USA

Chief Executive Officer
Title (Dr., Mr., Ms., etc.): Dr.
First Name: Renee
Last Name: Coffman
Position (President, etc.): President/CEO
Phone: 702-968-2017
Fax: 702-968-2090
Email: rcoffman@roseman.ed

Accreditation Liaison Officer
Title (Dr., Mr., Ms., etc.): Dr.
First Name: Thomas
Last Name: Metzger
Position (President, etc.): VP for Quality Assurance
Phone: 702-968-2013
Fax: 702-968-2090
Email: tmetzger@roseman.edu

Chief Financial Officer
Title (Dr., Mr., Ms., etc.): Dr.
First Name: Thomas
Last Name: Metzger
Position (President, etc.): VP for Business and Finance (Interim)
Phone: 702-968-2013
Fax: 702-968-2090
Email: tmetzger@roseman.edu

Institutional Demographics

Institutional Type *(Choose all that apply)*

☐Comprehensive
☒ Specialized
☒ Health-Centered
☐ Religious-Based
☐ Native/Tribal
☐ Other (specify): _____

Degree Levels *(Choose all that apply)*

☐ Associate
☒ Baccalaureate
☒ Master
☒ Doctorate
☐ If part of a multi-institution system, name of system: _____

Calendar Plan *(Choose one that applies)*

☐ Semester
☐ Quarter
☐ 4-1-4
☐ Trimester
☒ Other (specify): Block System

Institutional Control

☐ City ☐ County ☐ State ☐ Federal ☐ Tribal

○ Public OR ☒ Private/Independent
☒ Non-Profit OR ○ For-Profit

Students (all locations)

Full-Time Equivalent (FTE) Enrollment (Formula used to compute FTE): IPEDS

Official Fall 2019-2020 (most recent year) FTE Student Enrollments

Classification	Current Year Dates: 2019-20	One Year Prior Dates: 2018-19	Two Years Prior Dates: 2017-18
Undergraduate	598	656	505
Graduate	9	8	18
Professional	1034	1060	1057
Unclassified			
Total All Levels	1641	1724	1580

Full-Time *Unduplicated* Headcount Enrollment (Count students enrolled in credit courses only):

Official Fall 2019-20 (most recent year) Student Headcount Enrollments

Classification	Current Year Dates: 2019-20	One Year Prior Dates: 2018-19	Two Years Prior Dates: 2017-18
Undergraduate	598	656	505
Graduate	9	8	18
Professional	1034	1060	1057
Unclassified			
Total All Levels	1641	1724	1580

Faculty (all locations)

- Numbers of Full-Time and Part-Time Instructional and Research Faculty & staff
- Numbers of Full-Time (only) Instructional and Research Faculty & Staff by Highest Degree Earned

Include only professional personnel who are primarily assigned to instruction or research.

Total Number: 141 Number of Full-Time (only) Faculty and Staff by Highest Degree Earned

Rank	Full-Time	Part-Time	Less than Associate	Associate	Bachelor	Masters	Specialist	Doctorate
Professor	9							9
Associate Professor	39					3		36
Assistant Professor	84	131				27		57
Instructor	3					1		2
Lecturer and Teaching Assistant								
Research Staff and Research Assistant	6				3	1		2
Undesignated Rank								

Mean Salaries and Mean Years of Service of Full-Time Instructional and Research Faculty and Staff. Include only full-time personnel with professional status who are primarily assigned to instruction or research.

Rank	Mean Salary	Mean Years of Service
Professor	$139,511	7.1
Associate Professor	$142,200	7.3
Assistant Professor	$115,316	5.3
Instructor	$74,487	7.2
Lecturer and Teaching Assistant	-	-
Research Staff and Research Assistant	$73,070	3.5
Undesignated Rank	-	-

Financial Information. Please provide the requested information for each of the most recent completed fiscal year and the two prior completed fiscal years (three years total).

Please attach the following as separate documents submitted with the Basic Institutional Data Form

- Statement of Cash Flows
    - See Cash flow statements below from FY 2019 and FY 2018 audits covering years 2017-2019
- Balance Sheet – collapsed to show main accounts only; no details
    - See audited Balance Sheets below from FY 2019 and FY 2018 audits covering years 2017-2019
- Operating Budget
    - See operating budget summaries below for prior three years and current year
- Capital Budget
    - See capital budget summaries for prior three years
    - The capital budgets are prepared after the FY close after an assessment of available funds – thus capital projects are approved in September-November timeframe (see summaries below)
- Projections of Non-Tuition Revenue
    - See trends as present in the revenue summary below
    - Actuals are presented for the prior three years along with the budget for the current fiscal year
    - Currently, no projections for future years are available
    - Decrease in DMD clinic revenue from FY 18-19 to FY 19-20 was due to closures in the 4th quarter caused by the COVID-19 pandemic

Statement of Cash Flows FY 2019

Roseman University of Health Sciences and Subsidiaries
(A Nevada Non-Profit Corporation)

Consolidated Statements of Cash Flows
Years Ended June 30, 2019 and 2018

	2019	2018
Cash flows from operating activities:		
Change in net assets	$ 13,102,319	$ 8,343,288
Adjustments to reconcile change in net assets to cash provided by operating activities:		
Depreciation	6,061,421	6,237,157
Accretion of bond premium	(10,390)	(11,710)
Amortization of imputed interest	(902)	(922)
Amortization of debt issuance cost	129,523	136,405
Accretion of deferred interest	(154)	(1,922)
Provision for doubtful accounts	(46,028)	33,473
Discount on pledges	(3,991)	(18,190)
Endowment contribution	-	(10,000)
Realized and unrealized (gains) on investments, net	(1,173,826)	(325,291)
(Increase) decrease in assets:		
Notes and other receivables	(27,405)	128,429
Prepaid expenses	(145,128)	(702,182)
Refundable deposits	(1,001)	(13,374)
Pledges	10,286	(45,819)
Other	(897,275)	(30,685)
Increase (decrease) in liabilities:		
Accounts payable and accrued expenses	708,801	(366,405)
Unearned tuition income	(681,373)	1,652,198
Deferred dental medicine clinic income	(112,972)	(52,061)
Funds held for others	(189,456)	100,178
Deferred rent payable	(450,005)	(229,485)
Net cash provided by operating activities	16,272,444	14,823,082
Cash flows from investing activities:		
Investment purchases	(22,116,123)	(2,689,017)
Proceeds from sale of investments	17,329,601	1,976,696
(Increase) in debt service reserve funds	(77,480)	(304,990)
Purchases of property and equipment	(3,069,588)	(3,696,854)
Net cash used in investing activities	(7,933,590)	(4,714,165)
Cash flows from financing activities:		
Principal payments on debt	(1,932,607)	(1,154,261)
Proceeds from endowment contribution	-	10,000
Net cash used in financing activities	(1,932,607)	(1,144,261)

(Continued)

Statement of Cash Flows FY 2019 (continued)

Roseman University of Health Sciences and Subsidiaries
(A Nevada Non-Profit Corporation)

Consolidated Statements of Cash Flows (Continued)
Years Ended June 30, 2019 and 2018

	2019	2018
Net increase in cash, cash equivalents, and restricted cash	**$ 6,406,247**	$ 8,964,656
Cash, cash equivalents, and restricted cash:		
Beginning of year	**32,317,086**	23,352,430
End of year	**$ 38,723,333**	$ 32,317,086
Supplemental disclosure of cash flow information, cash payments for interest	**$ 5,781,963**	$ 5,840,247
Supplemental disclosure of noncash investing activity, purchase of property and equipment on account	**$ 275,311**	$ 616,105

See notes to consolidated financial statements.

Statement of Cash Flows FY 2018

Roseman University of Health Sciences and Subsidiaries
(A Nevada Non-Profit Corporation)

Consolidated Statements of Cash Flows
Years Ended June 30, 2018 and 2017

	2018	2017
Cash flows from operating activities:		
Change in net assets	$ 8,343,288	$ 4,010,286
Adjustments to reconcile change in net assets to cash provided by operating activities:		
Depreciation	6,237,157	6,132,936
Accretion of bond premium	(11,710)	(13,058)
Amortization of imputed interest	(922)	(1,095)
Amortization of debt issuance cost	136,405	115,306
Accretion of deferred interest	(1,922)	(2,061)
Provision for doubtful accounts	33,473	185,692
Discount on pledges	(18,190)	(24,349)
Endowment contribution	(10,000)	-
Realized and unrealized (gains) on investments, net	(397,121)	(552,435)
(Increase) decrease in operating assets:		
Notes and other receivables	128,429	(146,203)
Prepaid expenses	122,749	(452,694)
Refundable deposits	(13,374)	775
Pledges	(45,819)	239,200
Other	198,415	(332,065)
Increase (decrease) in operating liabilities:		
Accounts payable and accrued expenses	(366,405)	833,649
Unearned tuition income	1,652,198	791,950
Deferred dental medicine clinic income	(52,061)	202,765
Unearned grant income	-	(20,000)
Funds held for others	100,178	36,176
Deferred rent payable	(229,485)	(183,164)
Net cash provided by operating activities	15,805,283	10,821,611
Cash flows from investing activities:		
Withdrawal from restricted cash	699,291	332,512
Investment purchases	(2,689,017)	(9,850,061)
Proceeds from sale of investments	1,976,696	5,001,621
(Increase) decrease in debt service reserve funds	(233,160)	8,414
Purchases of property and equipment	(4,750,885)	(2,375,670)
Net cash used in investing activities	(4,997,075)	(6,883,184)
Cash flows from financing activities:		
Principal payments on debt	(1,154,261)	(1,376,733)
Proceeds from endowment contribution	10,000	-
Net cash used in financing activities	(1,144,261)	(1,376,733)

(Continued)

Statement of Cash Flows FY 2018 (continued)

Roseman University of Health Sciences and Subsidiaries
(A Nevada Non-Profit Corporation)

Consolidated Statements of Cash Flows (Continued)
Years Ended June 30, 2018 and 2017

	2018	2017
Net increase in cash and cash equivalents	**$ 9,663,947**	$ 2,561,694
Cash and cash equivalents:		
Beginning of year	**21,992,409**	19,430,715
End of year	**$ 31,656,356**	$ 21,992,409
Supplemental disclosure of cash flow information, cash payments for interest	**$ 5,840,247**	$ 5,899,774
Supplemental disclosure of noncash investing activity, purchase of property and equipment on account	**$ 616,105**	$ 117,537

See notes to consolidated financial statements.

Balance Sheet FY 2019

Roseman University of Health Sciences and Subsidiaries
(A Nevada Non-Profit Corporation)

Consolidated Statements of Financial Position
June 30, 2019 and 2018

	2019	2018
Assets		
Current assets:		
Cash and cash equivalents	$ 38,723,333	$ 31,656,356
Investments	18,001,924	14,022,924
Notes and other receivables, net of allowance	651,204	565,067
Prepaid expenses	3,205,415	3,060,287
Debt service reserve funds	1,842,510	1,916,722
Other	2,212,907	1,302,334
Total current assets	64,637,293	52,523,690
Noncurrent assets:		
Cash, restricted	-	660,730
Notes and other receivables, net of allowance	59,000	70,802
Investments	8,203,257	6,287,691
Property and equipment, net of accumulated depreciation and amortization	131,311,258	134,027,780
Investments, debt service reserve funds	7,986,142	7,768,668
Refundable deposits	349,111	348,110
Pledges, net of discount and allowance	60,836	67,131
Other	216,203	229,501
Total assets	$ 212,823,100	$ 201,984,103
Liabilities and Net Assets		
Current liabilities:		
Accounts payable and accrued expenses	10,466,804	$ 9,482,692
Current portion of long-term debt, net of borrowing costs	1,916,895	1,808,541
Unearned tuition income	9,780,373	10,461,746
Deferred dental medicine clinic income	606,453	696,586
Funds held for others	97,903	287,359
Deferred rent payable	348,011	186,545
Deferred interest income	-	149
Total current liabilities	23,216,439	22,923,618
Long-term liabilities:		
Deferred rent payable, net of current portion	6,691,734	7,303,205
Deferred dental medicine clinic income, net of current portion	138,975	161,814
Deferred interest income, net of current portion and borrowing costs	-	5
Long-term debt, net of current portion	96,607,957	98,529,785
Total liabilities	126,655,105	128,918,427
Net assets:		
Without donor restrictions	77,869,284	67,919,235
With donor restrictions	8,298,711	5,146,441
Total net assets	86,167,995	73,065,676
Total liabilities and net assets	$ 212,823,100	$ 201,984,103

See notes to consolidated financial statements.

Balance Sheet FY 2018

Roseman University of Health Sciences and Subsidiaries
(A Nevada Non-Profit Corporation)

Consolidated Statements of Financial Position
June 30, 2018 and 2017

	2018	2017
Assets		
Current assets:		
Cash and cash equivalents	$ 31,656,356	$ 21,992,409
Investments	14,022,924	12,916,442
Notes and other receivables, net of allowance	565,067	697,486
Prepaid expenses	2,235,356	2,358,105
Debt service reserve funds	1,916,722	1,735,236
Other	1,073,234	1,262,445
Total current assets	51,469,659	40,962,123
Noncurrent assets:		
Cash, restricted	660,730	1,360,021
Notes and other receivables, net of allowance	70,802	99,363
Investments	6,287,691	6,284,731
Property and equipment, net of accumulated depreciation and amortization	135,081,811	135,951,978
Investments, debt service reserve funds	7,768,668	7,716,994
Refundable deposits	348,110	334,736
Pledges, net of discount and allowance	67,131	3,122
Other	229,501	238,705
Total assets	$ 201,984,103	$ 192,951,773
Liabilities and Net Assets		
Current liabilities:		
Accounts payable and accrued expenses	$ 9,482,692	$ 9,232,992
Current portion of long-term debt, net of borrowing costs	1,808,541	1,024,919
Unearned tuition income	10,461,746	8,809,548
Deferred dental medicine clinic income	696,586	730,315
Funds held for others	287,359	187,181
Deferred rent payable	186,545	21,417
Deferred interest income	149	1,143
Total current liabilities	22,923,618	20,007,515
Long-term liabilities:		
Deferred rent payable, net of current portion	7,303,205	7,697,818
Deferred dental medicine clinic income, net of current portion	161,814	180,146
Deferred interest income, net of current portion and borrowing costs	5	933
Long-term debt, net of current portion	98,529,785	100,342,973
Total liabilities	128,918,427	128,229,385
Net assets:		
Unrestricted:		
Board designated funds, quasi-endowment	11,600,000	11,600,000
Undesignated	56,319,235	49,834,958
	67,919,235	61,434,958
Temporarily restricted	4,802,351	2,953,340
Permanently restricted	344,090	334,090
Total net assets	73,065,676	64,722,388
Total liabilities and net assets	$ 201,984,103	$ 192,951,773

See notes to consolidated financial statements.

Operating Budget

Roseman University of Health Sciences
Operating Budget History
FY21 - FY18

DESCRIPTION	Annual Budget FY20-21	Annual Budget FY19-20	Annual Budget FY18-19	Annual Budget FY17-18
Tuition and Fees	$ 84,459,032	$ 90,503,770	$ 89,790,738	$ 84,188,229
Orthodontic Dental Clinic	865,000	865,000	900,000	960,000
DMD Dental Clinic	4,095,000	3,795,000	3,229,515	2,893,162
CoM Clinic Revenue	2,867,424	1,200,000	2,347,943	200,000
Contributions	3,515,025	865,025	865,025	681,376
Interest Income	464,395	464,395	148,700	77,300
Investment Income	972,276	972,276	872,276	729,060
Grants - Fed State Private & Other	2,326,000	1,776,710	1,776,710	2,015,500
Other Revenue	1,712,200	1,597,064	829,295	821,771
Special Events	103,089	103,624	103,624	8,750
Revenues Before Special Event Costs	$ 101,379,441	$ 102,142,864	$ 100,863,826	$ 92,575,148
Direct Costs - Special Events	(46,635)	(47,170)	(47,170)	(7,000)
Total Revenue	$ 101,332,806	$ 102,095,694	$ 100,816,656	$ 92,568,148
Payroll Expense	$ 57,755,713	$ 55,764,206	$ 54,324,448	$ 50,358,312
Professional Fees	5,423,766	4,060,330	3,738,095	9,452,392
Rent & CAM Charges	377,475	5,917,985	5,899,578	5,623,938
Equipment Rental	1,773,398	1,932,464	1,899,529	2,039,934
General & Administrative	2,233,975	1,795,193	1,490,331	1,466,340
Program Costs	6,340,760	10,060,670	11,435,350	3,314,752
Donations	27,000	29,000	17,500	14,500
Utilities	2,005,113	1,814,764	1,753,466	1,681,321
Travel, Recruitment & Training	2,044,888	1,993,734	1,708,926	1,497,357
Dues & Subscriptions	2,446,372	2,462,741	2,285,071	2,144,435
Repair & Maintenance	2,358,501	1,788,979	1,710,631	1,547,163
Interest Expense / Bank Fees	9,260,155	6,088,235	6,058,298	6,109,492
Investment Fees	60,000	60,000	60,000	31,000
Grants - Federal and Private	15,000	15,000	15,000	15,000
Other Expenses & Contingency	785,018	1,417,699	1,298,647	909,955
Continuing Education Costs	16,500	24,765	16,565	14,765
Graduation, Convocation, Std. Prog	223,000	229,500	228,200	244,420
Scholarship Expense	133,172	79,922	53,872	53,872
Tuition Support	0	10,500	10,500	10,500
Depreciation & Loan Expenses	8,053,000	6,550,007	6,550,007	5,927,342
Total Expense	$ 101,332,806	$ 102,095,694	$ 100,554,014	$ 92,456,790
Net Surplus/(Deficit)	$ -	$ -	$ 262,642	$ 111,358

Capital Budget FY 2018 – FY 2020

		Approved Capital Projects FY18, FY19, FY20		
Fiscal_Yr	Dt_Approved	Unit	Project	Amount
FY18	10/7/2017	CoDM	LEASE FEE PROGRAM BIEN AIR HANDPIECES	202,831
FY18	10/7/2017	CoDM	NOMAD PRO 2	103,927
FY18	10/7/2017	CoDM	CONE BEAM CT	88,495
FY18	10/7/2017	CoDM	CASE BASED EDUCATION UPDATE - MONITORS	48,000
FY18	10/7/2017	CoDM	DIGITAL DENTRISTY - TRIOS SCANNER	62,959
FY18	10/7/2017	CoDM	CASE BASED EDUCATION UPDATE - REPURPOSING GI	66,000
FY18	10/7/2017	CoDM	ENDO MICROSCOPE	29,990
FY18	10/7/2017	CoDM	FIRSTACCESS AND IPADS WITH STANDS	38,363
FY18	10/7/2017	CoDM	Modu-Cell enclosed "B" Cabinets	37,350
FY18	10/7/2017	CoDM	AEGD NORMAD PRO 2	17,074
FY18	10/7/2017	CoDM	AEGD ENDO MICROSCOPE	14,995
FY18	10/7/2017	CoDM	SYSTEM B CORDLESS PACK AND TIP	4,057
FY18	10/7/2017	CoDM	MINIENDO ULTRASONIC	4,046
FY18	10/7/2017	COP	Mass Spectrometer (QDa detector)	53,138
FY18	10/7/2017	COP	Nitrogen Generator and Multi-mode detector	46,721
FY18	10/7/2017	COP	EMP Software	34,000
FY18	10/7/2017	Nursing	South Jordan Nursing Simulation Laboratory Expansion	121,015
FY18	10/7/2017	Library	HD Library Materials	17,000
FY18	10/7/2017	Library	SJ Library Materials	18,500
FY18	10/7/2017	Library	HD Replacement Student Use Table & Chairs	3,620
FY18	10/7/2017	Library	SJ Replacement Student Use Table & Chairs	3,620
FY18	10/7/2017	IT	MBA Classroom Upgrade	62,300
FY18	10/7/2017	IT	4 Sunset Way Server Upgrade	58,000
FY18	10/7/2017	IT	P2 Classroom Power Management and web conferencing hardv	16,100
FY18	10/7/2017	IT	N1 Classroom Power Management and web conferencing hard	13,500
FY18	10/7/2017	IT	P1 Classroom Power Management and web conferencing hardware	13,500
FY18	10/7/2017	IT	11 Sunset Way – Core Layer Switch Upgrade	12,000
FY18	10/7/2017	IT	N1 Classroom web conferencing hardware addition	11,300
FY18	10/7/2017	IT	N2 Classroom Power Management	6,200
FY18	10/7/2017	IT	Video Camera	3,000
FY18	10/7/2017	IT	Henderson Campus PA System	2,100
			Total Approved FY18 Capital Projects	1,213,701
FY19	11/13/2018	IT-SM	Upgrade Auditorium	$ 67,847

Capital Budget FY 2018 – FY 2020 (continued)

FY19	**11/13/2018**	CODM-HD	3D printer	$	5,373
FY19	**11/13/2018**	CODM-HD	Valo Curing Light	$	10,400
FY19	**11/13/2018**	CODM-HD	Intraoral Scanner	$	20,000
FY19	**11/13/2018**	CODM-SJ	Pt Satisfaction kiosks	$	9,370
FY19	**11/13/2018**	CODM-SJ	Pt check in kiosks	$	16,478
FY19	**11/13/2018**	CODM-SJ	1st floor Triton modification	$	6,577
FY19	**11/13/2018**	CODM-SJ	Clinic instrument mobile cells	$	34,798
FY19	**11/13/2018**	CODM-SJ	Intraoral Scanner	$	75,908
FY19	**11/13/2018**	CODM-SJ	Micro CT Training	$	16,200
FY19	**11/13/2018**	CODM-SJ	Learning Stream Software	$	5,670
FY19	**11/13/2018**	CODM-SJ	MS Power BI purchase	$	3,360
FY19	**11/13/2018**	CODM-SJ	Research lab buildout	$	35,811
FY19	**11/13/2018**	CON - HD	EMR and Med Carts (both campuses)	$	158,281
FY19	**11/13/2018**	CON - HD	Simulation lab upgrade	$	31,450
FY19	**11/13/2018**	COP	Gas Chromatograph (GS) / Mass Spectrometer (MS)	$	52,037
FY19	**11/13/2018**	COP	Nuclear Magnetic Resonance (NMR)	$	81,100
FY19	**11/13/2018**	COP	Replacement lab equipment	$	34,812
FY19	**11/13/2018**	COP	Sterility testing equipment	$	50,159
FY19	**11/13/2018**	Facilities-HD	Security Camera Upgrades	$	119,400
FY19	**11/13/2018**	Facilities-HD	Replace flooring in Nursing skills lab	$	9,000
FY19	**11/13/2018**	Facilities-HD	N1/N2 Classroom refresh	$	105,000
FY19	**11/13/2018**	Facilities-SJ	Parking lot expansion	$	373,000
FY19	**11/13/2018**	Facilities-SJ	Security Camera Upgrades	$	116,700
FY19	**11/13/2018**	Facilities-SJ	Classroom graphics	$	81,980
FY19	**11/13/2018**	Facilities-SM	Security Camera Upgrades	$	29,440
FY19	**11/13/2018**	IT-HD	Ortho AV system updates	$	291,982
FY19	**11/13/2018**	IT-SJ	Server upgrade	$	102,005
FY19	**11/13/2018**	IT-SJ	Dental building UPS	$	28,862
FY19	**11/13/2018**	IT-SJ	D2 Classroom projector upgrade	$	27,000
			Total Approved FY19 Capital Projects	$	2,000,000.00
FY20	**9/10/2019**	CODM-SJ	CORE Lab Facility	**$**	**216,240**
FY20	**9/10/2019**	CODM-SJ	Trio 4 Move Intraoral Scanning (6)	**$**	**182,220**
FY20	**9/10/2019**	CODM-SJ	Patient satisfaction kiosks (3)	**$**	**13,682**
FY20	**9/10/2019**	CODM-SJ	Guest chairs for operatories (12)	**$**	**14,717**
FY20	**9/10/2019**	CODM-SJ	Sterilizer Transfer cart	**$**	**8,687**
FY20	**9/10/2019**	CODM-SJ	Ultrasonic Scalers for Sim Lab (25)	**$**	**20,295**
FY20	**9/10/2019**	CODM-SJ	Surgical equipment replacement (6)	**$**	**28,785**

Capital Budget FY 2018 – FY 2020 (continued)

FY20	9/10/2019	CODM-SJ	Replacement Ultrasonic scalers (30)	$	24,354
FY20	9/10/2019	CODM-SJ	Additional Radiosurge Electrosurgery Units (3)	$	6,196
FY20	9/10/2019	CODM-SJ	Bioclear Kits (20)	$	44,520
FY20	9/10/2019	CODM-SJ	License for Dental Implants	$	8,324
FY20	9/10/2019	COP-HD	NIST MS Library for GC/MS Compound ID	$	3,476
FY20	9/10/2019	COP-HD	Microscope updgrades	$	3,262
FY20	9/10/2019	COP-HD	Water Bath	$	1,036
FY20	9/10/2019	COP-HD	Centrifuge for Cell Culture Lab	$	60,271
FY20	9/10/2019	CON-HD	MSN-FNP Pediatric and Gynecological Trainers (Sim)	$	69,117
FY20	9/10/2019	CON-HD	Maternal Newborn Sim equipment replacement	$	92,736
FY20	9/10/2019	CON-HD	Sim Lab Upgrade	$	77,059
FY20	11/30/2019	CON-HD	Two Office's Buildout		
FY20	9/10/2019	CON-SJ	Add'l Office space/furniture (6 offices frames/2 furnished)	$	36,600
FY20	9/10/2019	CON-SJ	SimPads for Tetherless Manikin Sim. (4)	$	6,380
FY20	9/10/2019	LIBR-SJ	Furniture replacement	$	37,400
FY20	9/10/2019	LIBR-HD	Furniture replacement	$	46,180
FY20	11/11/2019	LIBR-HD	E-Books - CON FNP Program	$	4,000
FY20	9/10/2019	FAC-HD	11 Sunset Way Main hallway carpet replacement	$	85,680
FY20	9/10/2019	FAC-HD	11 Sunset Way Lighting retrofit with LED lighting	$	92,736
FY20	9/10/2019	FAC-HD	11 Sunset Way Speed bumps and signage	$	9,059
FY20	9/10/2019	FAC-HD	11 Sunset Way Landscaping	$	51,317
FY20	9/19/2019	FAC-HD	14B Buildout Project	$	265,351
FY20	10/1/2019	FAC-SJ	CODM - Bldg 11 - 3rd Floor Expansion	$	3,800,000
FY20	11/20/2019	FAC-SJ	South Jordan Building Automation Upgrade	$	65,000
FY20	9/10/2019	FAC-SJ	Replacement of conference room chairs	$	12,635
FY20	9/10/2019	FAC-SJ	Replace common area carpeting	$	78,555
FY20	9/10/2019	IT-ALL	Phone replacement	$	96,500
FY20	9/10/2019	IT-SJ	Student Commons AV system upgrade	$	92,736
FY20	9/10/2019	IT-SJ	N3/Multipurpose classroom AV system upgrade	$	55,524
FY20	9/10/2019	IT-HD&SJ	Mediasite Recorder refresh	$	21,900
FY20	9/10/2019	IT-SJ	D2 and D3 Cisco classroom VTC update	$	57,299
FY20	9/10/2019	IT-HD&SJ	Break Out Room Monitors	$	439,006
FY20	9/10/2019	IT-HD	Nursing Classrooms Projector Upgrade	$	84,064
FY20	9/10/2019	IT-HD	Dolphin Cloud Migration	$	58,135
FY20	10/24/2019	IT-SU	Summerlin Server Upgrade		
FY20	10/31/2019		Institutional Repository	$	29,000
			Total Approved FY20 Capital Projects	$	6,371,034

Projections of Non-Tuition Revenue

Roseman University of Health Sciences

Revenue History

Total Revenue and Non-Tuition Revenue FY20 - FY18

Revenue Categories	Annual Budget FY20-21	FY19-20 Actual (Unaudited)	FY18-19 Actual	FY17-18 Actual
Tuition and Fees	$ 84,459,032	$ 88,689,674	$ 89,856,680	$ 85,948,020
Orthodontic Dental Clinic	865,000	652,367	701,238	786,197
DMD Dental Clinic	4,095,000	3,172,472	3,636,917	3,193,247
CoM Clinic Revenue	2,867,424	1,555,162	1,106,492	483,392
Contributions	3,515,025	4,065,067	3,907,875	2,579,258
Interest Income	464,395	416,350	483,945	98,012
Investment Income	972,276	1,662,717	1,993,928	830,581
Grants - Fed State Private & Other	2,326,000	2,334,717	2,931,006	2,401,708
Other Revenue	1,712,200	1,967,750	1,746,897	917,854
Special Events	103,089	108,349	107,204	114,880
Revenues Before Special Events Costs	$ 101,379,441	$ 104,624,625	$ 106,472,182	$ 97,353,149
Direct Costs - Special Events	(46,635)	(32,446)	(28,194)	(17,997)
Total Revenue	$ 101,332,806	$ 104,592,179	$ 106,443,988	$ 97,335,152
Total Non-Tuition Revenue	$ 16,873,774	$ 15,902,505	$ 16,587,308	$ 11,387,132

New Degree / Certificate Programs

Substantive Changes

Substantive changes including degree or certificate programs planned for 2020 – 2021 approved by the institution's governing body. If NONE, so indicate. *Please feel free to create the list using the headings we have specified and submit it as an Excel spreadsheet.*

* *This listing does not substitute for a formal substantive change submission to NWCCU*

Substantive Change	Certificate/Degree Level	Program Name	Discipline or Program Area
None			

Domestic Off-Campus Degree Programs and Academic Credit Sites

Report information for off-campus sites within the United States where degree programs and academic coursework is offered. (Add additional pages if necessary.)

- **Degree Programs** – list the ***names*** of degree programs that can be completed at the site.
- **Academic Credit Courses** – report the ***total number*** of academic credit courses offered at the site.
- **Student Headcount** – report the ***total number*** *(unduplicated headcount)* of students currently enrolled in programs at the site.
- **Faculty Headcount** – report the ***total number*** *(unduplicated headcount)* of faculty (full-time and part-time) teaching at the site.

Programs and Academic Credit Offered at Off-Campus Sites within the United States

Name of Site	Physical Address	City, State, Zip	Degree Programs	Academic Credit Courses	Student Headcount	Faculty Headcount
None						

Distance Education

Degree and Certificate Programs of 30 semester or 45 quarter credits or more where at least 50% or more of the curriculum is offered by Distance Education, including ITV, online, and competency-based education. Adjust entries to category listings below as appropriate. ***If your list is longer than ten entries, please create a list using the heading we have specified and upload it in the box provided as an Excel spreadsheet.***

* *This listing does not substitute for a formal substantive change submission to NWCCU*

Name of Site	**Physical Address**	**Degree/Certificate Name/Level**	**Program Name**	**Student Enrollment** (Unduplicated Headcount)	**On-Site Staff** (Yes or No)	**Co-Sponsoring Organization** (if applicable)
Henderson Campus	11 Sunset Way	MSN	Masters of Nursing/Family Nurse Practitioner	28	Yes	

Programs and Academic Courses Offered at Sites Outside the United States

Report information for sites outside the United States where degree programs and academic credit courses is offered, including study abroad programs and educational operations on military bases. (Add additional pages if necessary)

- **Degree Programs** – list the ***names*** of degree programs that can be completed at the site.
- **Academic Credit Courses** – report the ***total number*** of academic credit courses offered at the site.
- **Student Headcount** – report the ***total number*** *(unduplicated headcount)* of students currently enrolled in programs at the site.
- **Faculty Headcount** – report the ***total number*** *(unduplicated headcount)* of faculty (full-time and part-time) teaching at the site.

Programs and Academic Credit Courses offered at Sites outside the United States

Name of Site	Physical Address	City, State, Zip	Degree Programs	Academic Credit Courses	Student Headcount	Faculty Headcount
None						

Preface

Institutional Changes Since Last Report

The last report submitted to NWCCU was a Financial Resources Review (FRR) submitted on May 1, 2019. Per its letter of July 12, 2019, NWCCU accepted the FRR and requested an FRR with a Substantive Change Proposal when the College of Medicine Plan proceeds (plans and timeframes for the College of Medicine will be discussed below).

Prior to the submission of the May 2019 FRR, the University began its strategic planning process for the 2020-2025 Strategic Plan. In February of 2018, a planning summit was held with members from all academic and support units as well as members of the university's Board of Trustees. This was followed by an internal Strategic Planning Summit in August of 2018. Subsequent meetings with Board and University Administrators were held in February and October of 2019 to refine the input gathered in prior meetings and establish a vision for the next strategic plan. To ensure inclusion in the planning process, a President's Cabinet was formed in April of 2019. This group consists of members from all units (academic and support) and reviewed all input as well as provided needed input throughout each step in the process. Based on the discussions held throughout these months, a new Mission Statement was drafted in March of 2020. This statement was reviewed and approved by the University's Administrative Council on 4/13/2020 and the Board of Trustees on 5/8/2020. With the new Mission Statement as a guide, a Strategic Plan was drafted in May 2020 for the upcoming 5 years. This plan was approved by the University's Administrative Council on 7/20/2020 and the Board of Trustees on 8/7/2020. The new Mission Statement and Strategic Plan will be discussed in detail under Standards 1.A and 1.B.

Several key personnel changes have taken place since the last report. In August 2019, Mr. Michael Blimes joined the University as Vice President for Philanthropy. Michael has decades of experience in fundraising and the overall fundraising team has increased from three to six FTE. In July 2020, two existing employees have taken new positions. Jason Roth has moved from Vice President for Marketing and Communications to Vice President for Communications and Partnerships. Vanessa Maniago, formerly Special Advisor to the President, has taken the position of Vice President for Strategic Implementation and Engagement. Along with Rachael Thomas, Director of Marketing, Vanessa oversees Institutional Marketing and Branding. As the University has grown and changed, needs for both marketing and communications have grown and changed as well. To address those needs, it became clear that restructuring one Marketing and Communications unit into two separate, but close-working units was desirable. In July 2020, Ken Wilkins, Vice President of Business and Finance left the University. A search is currently ongoing, interviews are scheduled for two qualified candidates in September, and it is expected that the position will be filled by the time of the Site Visit. In the interim, Dr. Tom Metzger, Vice President for Quality Assurance and Intercampus Consistency, is serving in the position. All of the positions mentioned above can be identified in the Roseman University Organizational Chart **(Appendix 1)**.

Two changes regarding academic programs have taken place. First, the College of Nursing has enrolled its first two classes in the Masters of Science in Nursing/Family Nurse Practitioner program. The classes were enrolled in January and July of 2020. The program is progressing as expected per its substantive change report to NWCCU in 2018. Secondly, after an in-depth analysis performed in 2019-20, it was

decided to discontinue enrollments in the MBA programs and provide a teach out to existing students. The teach out plan was presented to the university's Administrative Council and approved on March 30, 2020. The Board of Trustees approved the plan on May 8, 2020. All current MBA students are also enrolled in professional programs (PharmD, DMD, and AEODO/MBA (Orthodontics residency)). All pathways for completion of the MBA program will continue to be offered. Starting with the 2020-21 academic year, the MBA program will no longer enroll new PharmD or DMD students. The MBA program will continue to be a requirement of the AEODO/MBA for residents enrolling in 2020 and 2021. The AEODO/MBA program is a 3-year program and thus MBA classes will continue until the 2023-24 academic year. The teachout plan was communicated to the Commission in July of 2020 and is included with this report as **Appendix 2**.

Finally, in August of 2019, the Dean of the College of Medicine, Dr. Mark Penn resigned from the University. During this time, the University maintained is commitment to the College of Medicine and in October of 2019, in conjunction with Tripp Umbach, a national leader in healthcare consulting, hosted a symposium on the Future of Medicine on the Roseman Campus in Summerlin Nevada. The symposium brought together nationally-recognized leaders in medical education from across the country to share their vision and passion regarding the transformation of academic medicine as it interfaces with population health, technology, policy, and practice. In late 2019 and early 2020, the University conducted a national search for a College of Medicine Dean. In March of 2020, Dr. Pedro "Joe" Greer was named Dean of the Roseman College of Medicine. Dr. Greer previously established the Department of Humanities, Health, and Society at the Florida International University College of Medicine and spearheaded its nationally and internationally recognized interprofessional medical education program. Dr. Greer is one of only three Americans that have received both the Presidential Medal of Freedom and the prestigious MacArthur "Genius" Fellowship. Joining Dr. Greer at Roseman are four Senior Executive Dean in the areas of: Academic and Student Affairs, Community Health Innovation, Diversity, Equity and Inclusion, and Faculty Affairs and Learning. Dr. Greer joined the University in June of 2020 and the rest of the team joined in July. The expertise of this team aligns with and supports the University's new Mission Statement and Strategic Plan.

Response to Topics Previously Requested by the Commission

In accepting the Financial Resources Review of May 2019, the Commission has requested that the University submit an FRR with a Substantive Change Proposal regarding the College of Medicine when the University moves ahead with its plan for the College. As noted above, the leadership team of the College of Medicine is now in place. It is expected that Roseman will submit the requested FRR and Substantive Change Proposal in the Spring or Summer of 2022 in conjunction with its submission to the Liaison Committee on Medical Education (LCME). This timeframe would be consistent with a charter class enrollment in Fall of 2024.

Standard One:
Student Success and Institutional Mission and Effectiveness

1.A Institutional Mission

1.A.1	The institution's mission statement defines its broad educational purposes and its commitment to student learning and achievement.

An Expanding Mission: A New Mission Statement

In its twenty - year history, Roseman has evolved from its start as the Nevada College of Pharmacy with its first cohort of 36 students, to a multifaceted Health Sciences Institution offering multiple professional programs, patient care through its growing clinical footprint, Research, and Community Engagement through its community programs, educational offerings, and events. In the last five years, Roseman has seen dramatic expansion of its assets, partnerships and reach into the communities it serves.

As such, the Mission Statement needed to reflect Roseman's new dimensions as well as represent its future path forward in meeting the diverse and changing needs of our students, employees, patients, and community. Through our Strategic Planning and Implementation Process (SPIP), and input from our President's Cabinet, a revised Mission Statement was presented, revised after input, and approved by Administrative Council in April 2020. It was then shared with our Board of Trustees, which approved it at their May 2020 meeting.

New Mission Statement

Roseman University of Health Sciences advances the health and wellness of the communities we serve by educating current and future generations of health professionals, conducting research and providing patient care. We actively pursue partnerships and affiliations that are aligned with our mission, work to create an environment that fosters both internal and external collaboration to achieve optimal outcomes and are committed to responsible fiscal management in all endeavors.

1.B Improving Institutional Effectiveness

1.B.1	The institution demonstrates a continuous process to assess institutional effectiveness, including student learning and achievement and support services. The institution uses an ongoing and systematic evaluation and planning process to inform and refine its effectiveness, assign resources, and improve student learning and achievement.

The development of the new Mission Statement and Strategic Plan began in February of 2018 with a Strategic Planning Summit. At that event, a variety of University and program administrators presented their outlook to the Roseman Board of Trustees to provide input to the ongoing planning process. The was followed by an internal summit in August of 2018 in which all input was gathered from academic programs and all support units to ensure of complete survey of the institution and its environment was available as input for subsequent review and refinement. As in 2018, the Board of Trustees was again brought together in February of 2019 to begin to establish priorities for the new Strategic Plan. In April 2019, a President's Cabinet was established. This group has over 20 members and includes representation from all academic and support units within the University. This broad representation ensures that input is received, communicated and reviewed across the entire University. This group met several times in 2019 in preparation for the Board of Trustees Strategic Plan Visioning event held in October 2019. At that meeting, priorities were discussed that would be used to outline a new strategic plan. The results of that meeting were then reviewed and discussed with the President's Cabinet in February 2020 and a draft of the Strategic Plan was produced in the Spring of 2020. First, the new Mission Statement was drafted, reviewed and approved by the University's Administrative Council on 4/13/2020 and the Board of Trustees on 5/8/2020. The Strategic Plan was drafted in May 2020 for the upcoming 5 years. This plan was approved by the University's Administrative Council on 7/20/2020 and the Board of Trustees on 8/7/2020. The Strategic Planning process described above is shown graphically in **Figure 1**. The Strategic Plan itself is included as **Appendix 3**.

Figure 1

Embedded within the 2020-2025 Roseman Strategic Plan is an Annual Implementation Plan (AIP) that details specific actions items that enable the University to remain on track in advancing toward its goals while retaining the flexibility to adapt to a rapidly changing environment. The current AIP provides action items for AY 20-21 and as the implementation process advances, new or modified action items would be developed for AY 21-22 and beyond. The Mission Statement is disaggregated into six operational areas, each of which has its own "Target Goals" that provide direction for actions to be taken toward achieving these goals. The operational areas are derived from the Mission Statement as follows:

Roseman University of Health Sciences advances the health and wellness of the communities we serve by ***educating current and future generations of health professionals****,* ***conducting research*** *and* ***providing patient care****. We actively* ***pursue partnerships and affiliations*** *that are aligned with our mission, work to create an environment that* ***fosters both internal and external collaboration*** *to achieve optimal outcomes and are committed to responsible* ***fiscal management*** *in all endeavors.*

SIX OPERATIONAL AREAS

- Educating current and future generations of health professionals
- Conducting Research
- Providing Patient Care
- Pursuing complementary partnerships and affiliations
- Fostering internal and external collaboration
- Responsible fiscal management

These six operational areas derived from the Mission Statement drive the Strategic Initiatives that comprise the AIP. Each Strategic Initiative maps to one or several operational areas. The AIP establishes "Working Groups" that have primary responsibility for achieving the outcomes set forth in the AIP. Target goals for each Operational Area can be found on pp. 8-10 of the Strategic Plan and Strategic Initiatives, as well as the composition of each Working Group that supports the initiative, can be seen on pp. 11-16 of the Strategic Plan. Each quarter reports are submitted to the President's Cabinet and the Board of Trustees. These quarterly reports are submitted in October, January, and April and lead to the annual Strategic Planning Summit held in April. Output from the summit is then used to draft an Annual Report and enables construction of the revised Implementation Plan for the coming year and tracks progress and achievement toward the goals outlined within the six operational areas of the Strategic Plan. The Strategic Planning Lifecycle and Implementation Plan is depicted in **Figure 2**.

Figure 2

1.B.2	The institution sets and articulates meaningful goals, objectives, and indicators of its goals to define mission fulfillment and to improve its effectiveness in the context of and in comparison with regional and national peer institutions.

The 2020-2025 Strategic Plan and its associated Implementation Plan define the goals and objectives that provide the basis for assessing mission fulfillment. The plan is tied directly to the Mission Statement through its identification of operational areas. All Strategic Initiatives touch on one or multiple operational areas and each operational area includes its own Target Goals. Each quarter, reports are generated that assess progress toward goals and thus mission fulfillment and the annual review cycle **(Figure 2)** includes time to review progress as well as assess whether the initiatives and current efforts toward those goals are effective. Furthermore, each strategic initiative has a working group that identifies a clear leader or leadership team that will be responsible for the working group's progress and reporting the outcomes and achievements of the working group quarterly.

Where some of the initiatives and goals are unique to the University, it is not always possible to identify indicators that can be compared with regional and national peer institutions. However, indicators

regarding student achievement are more easily contextualized as this is discussed below under standard 1.D.

1.B.3	The institution provides evidence that its planning process is inclusive and offers opportunities for comment by appropriate constituencies, allocates necessary resources, and leads to improvement of institutional effectiveness.

Figure 1 outlines the planning process that led to the current Strategic Plan. This included the establishment of the President's Cabinet. A list of the members of the President's Cabinet is given as **Appendix 4**. All units within the University are represented on this group and each unit head can provide input from anyone within their unit. The Cabinet is thus designed to be as inclusive as possible and provide a regular periodic forum for feedback and comment.

The frequent reporting built into the Annual Implementation plan ensures a flow of feedback that can be linked to the University's annual budgeting process. The operating budget process begins in February where all units prepare their needs for the coming year in consultation with the University Budget Committee. The Budget Committee then reviews all input prior to individual meetings with all unit heads/budget managers. There is significant overlap among unit heads/budget managers and the President's Cabinet to ensure a link between the planning/implementation process and budgeting. Additionally, the internal processes and documentation that accompany both new academic program and capital requests requires the unit head to submit a plan for approval that demonstrates how the budget request links back to the strategic plan and initiatives. As the University works to continue to align these processes, it is noteworthy that for the 2020-21 year the University was able to forego any tuition increase for the first time while providing a three percent raise for all employees during these challenging times.

1.B.4	The institution monitors its internal and external environments to identify current and emerging patterns, trends, and expectations. Through its governance system it considers such findings to assess its strategic position, define its future direction, and review and revise, as necessary, its mission, planning, intended outcomes of its programs and services, and indicators of achievement of its goals.

The processes described above in 1.B.1 demonstrate how the University has addressed this element. A broad-based scan of the internal and external environment began in February 2018 and culminated in the revised Mission Statement and 2020-2025 Strategic Plan. Moreover, the Annual Implementation Plan and Strategic Plan Lifecycle provide structure and afford the opportunity for feedback that enables needed flexibility to adapt as needed to a changing environment.

1.C Student Learning

1.C.1	The institution offers programs with appropriate content and rigor that are consistent with its mission, culminate in achievement of clearly identified student learning outcomes that lead to collegiate-level degrees, certificates, or credentials and include designators consistent with program content in recognized fields of study.

Roseman University of Health Sciences offers an undergraduate (bachelors completion only) program, graduate programs and a residency program (table below). Roseman offers programs that are consistent with its mission statement and its degree and certificate programs ensure that the primary goal of its programs is to provide students with advanced knowledge and a high level of clinical competencies that is necessary for successful clinical practice. The University's educational programs include the following:

Name of Program	Number of Credit Hours Required for Completion	Henderson Campus	South Jordan Campus	Total Enrollment AY 20-21*	Degree /Certificate Awarded
Doctor of Pharmacy	179	381	175	556	Pharm.D.
Bachelor of Nursing	76.9	100	77	177	BSN
Accelerated Bachelor of Nursing	76.9	168	113	281	BSN
Masters' of Science in Nursing/Family Nurse Practitioner	48	27		27	MSN
Advanced Education in Orthodontics and Dentofacial Orthopedics/MBA	211/48	30		30	AEODO Certificate/MBA
Doctor of Dental Medicine	399		383	383	DMD

*Anticipated Enrollment numbers as of 9/1/20

At Roseman, the system of curricular delivery is different than in traditional systems of higher education in which the curricular content is delivered in quarters or semesters. The system of curricular delivery offered by Roseman allows students to take only one class at a time. This system of curricular delivery is known as a "block" system. The block system allows students to focus on one discrete content area at a time and master that content before proceeding to the next content area. In the block system employed by Roseman, students are engaged in instructional activity with faculty and peers for six hours a day, Monday through Friday.

Consequently, the block system offers several advantages over a quarter or semester system, namely:

- The ability to deliver the didactic components of the curriculum in fewer calendar days, but with more contact hours.
- It provides students with the opportunity to read, hear, talk about, reflect upon, and study a subject area without distraction from other subjects.
- The block system allows for, and indeed, demands incorporation of active learning strategies in the classroom.

Roseman is committed to criterion-referenced assessment (demonstration of competence is dependent upon an individual student's performance relative to the criteria for competence), because in the education of professionals, (particularly health-care professionals) it is critical that all students have demonstrated that they are fully competent. Moreover, due to the nature of healthcare, the competency standards must be set at high levels. For Roseman University's academic programs, a student is deemed

to have achieved competency when he/she answers 90% or more of the assessment items correctly. Thus, a student either achieves competency (or "passes") in specific content areas, or he/she does not. If a student does not pass, he/she is given additional time to learn the material ("remediate"), demonstrate competency, and pass.

For all academic programs, students are provided with frequent formative assessment (in class quizzes and active learning activities) and biweekly summative assessments. This summative assessment is a fairly traditional, paper-and-pencil "exam", generally objective in format (i.e., multiple-choice, true-false, and matching items). In addition to the individual assessment, students with their respective student teams complete the same "exam" they just took individually, as a team. In recognition of the value of students' experience in the team exam with respect to enhancing student learning and competence, if the team scores a 95% or higher on the team exam, each team member receives 5 percentage points added to his/her individual assessment score. Students who haven't achieved the passing standard of a 90% score (inclusive of any percentage points added from the team exam), must return on Monday for additional remediation and reassessment. Should a student not achieve the passing standard of 90% following the remediation assessment, they are given an additional opportunity to remediate the content during the summer. Student progression through that academic year is not deterred, as faculty have reasoned that although they have not met the standard for that particular two-weeks' content, they have sufficient background to allow successful completion of subsequent blocks.

Remediation periods are held during a designated period either within the academic year or immediately prior to the start of the next academic year (depending on the program). Each student is assigned time for intensive restudying, review, and remediation with faculty for each assessment he/she was unable to demonstrate competency during the regular academic year or designated portion of that year. Furthermore, as all programs have a significant experiential component, a similar assessment process with opportunities for remediation is built into the curricular structure. Rubrics for assessment for the experiential outcomes are established within each program and are clearly defined and communicated to all students. It should also be noted that given Roseman's philosophy that remediation is an essential component of the Roseman educational model, students are not assessed any additional tuition or fees for remediation.

These outcomes and the rubrics needed for their assessment are established within appropriate guidelines and quality standards within that profession. For example, The BSN Program was developed and implemented to reflect The Essentials of Baccalaureate Education for Professional Nursing Practice (American Association of Colleges of Nursing, 2008*)* and *Quality and Safety Education for Nurses* (*QSEN) Competencies* (QSEN, 2018). For the PharmD program, all aspects of the curriculum including didactic learning outcomes, assessment questions, skills-based activities and clinical rotation outcomes are mapped to college and university programmatic goals as well as the most current ACPE Standards. The specific CODM learning outcomes reflect the competencies expected of DMD graduates by The Commission on Dental Accreditation (CODA).

Name of Program	National Licensing Examinations
Doctor of Pharmacy	North American Pharmacist Licensure Examination (NAPLEX)
Bachelor of Nursing	National Council Licensure Examination (NCLEX)
Doctor of Dental Medicine	National Board Dental Examinations
Masters' of Science in Nursing/Family Nurse Practitioner	American Academy of Nurse Practitioners OR American Nurses Credentialing Center
Master in Business Administration	N/A
AEODO/MBA	American Board of Orthodontics (ABO) written examination

1.C.2	The institution awards credit, degrees, certificates, or credentials for programs that are based upon student learning and learning outcomes that offer an appropriate breadth, depth, sequencing, and synthesis of learning.

Roseman University offers 5 degrees (BSN, MSN, MBA, PharmD and DMD) and one combined certificate/degree (AEODO/MBA). Each program is designed to fulfill the competencies as published. Courses are designed and administered in a sequential manner to ensure progressive learning. The curriculums of all programs are designed to provide ample active learning tools for the students to succeed. Moreover, each program is guided by external guides from organizations (programmatic accreditors, licensing boards) within their respective professions. Learning outcomes must be consistent with preparation for licensure in all degree programs with the exception of the MBA program (see 1.C.1. for program licensure examinations). While elective courses are available, most programs have curricula that are set and students' progress through the various curricular blocks as part of a cohort. In this way, breadth, depth, sequencing and synthesis of learning are building into the educational model and structure of the curriculum. With the exception of the MBA program, which does not have a clinical component to its curriculum, students receive instruction and application prior to entering clinical care aspects of the program. Details of each programmatic curriculum may be found in the University Catalog.

1.C.3	The institution identifies and publishes expected program and degree learning outcomes for all degrees, certificates, and credentials. Information on expected student learning outcomes for all courses is provided to enrolled students.

Outcomes-based education is a foundational element of the Roseman educational model. Student learning outcomes are provided to students at the course, program, and degree level for all programs.

Program level outcomes for the College of Nursing may be found on pp. 17-21 of the 2020-21 College of Nursing Student Handbook. This includes both BSN and MSN programs. In the College of Pharmacy, the Curriculum Committee recently brought forth 10 revised programmatic goals for review by the faculty and staff. These goals are now being reviewed by other college committees (Assessment Committee and Academic Performance of Standards Committee) for further comment and will be brought forth for full faculty vote in the upcoming months. The draft goals can be reviewed as **Appendix 5** and, once approved, will be published on the College's website. The DMD program learning outcomes are published on pp. 80-81 of the University Catalog in the Curriculum section. For each of these degree programs, learning outcomes are significantly influenced by programmatic accrediting bodies and licensure requirements for each profession.

For all programs at the course level, a block syllabus (commonly referred to as a block plan) is distributed to each student prior to the start of the block. Learning outcomes for each day in the block are detailed in that document. The learning outcomes in the block plan are the basis for the regular assessments that the students take to assess their performance and receive credit. An example of a block plan from the College of Pharmacy is included as **Appendix 6**. Programs that require the students to work in a clinic setting also provide copies of the Clinic Operating Manual that is reviewed and discussed with students by appropriate clinical faculty.

1.C.4	The institution's admission and completion or graduation requirements are clearly defined, widely published, and easily accessible to students and the public.

Admission and graduation requirements for each academic program are published in the University Catalog, and individual program pages on the University website. The Admissions Committee within each College sets forward guidelines for admission into the various programs. The Admission Office reviews applications and invites a select group of applicants for an interview.

- College of Nursing
  - Admissions, Criteria, Policies, and Procedures (2020-2021 Student Catalog, pg. 37)
  - Graduation (2020-2021 Student Catalog, pg. 45)
- Masters' Business Administration
  - Admissions Requirements and Processes (2020-2021 Student Catalog, pg. 48)
  - Graduation Requirements (2020-2021 Student Catalog, pg. 55)
- College of Pharmacy
  - Technical Standards for Admission, Advancement, and Graduation (2020-2021 Student Catalog, pg. 58)
- College of Dental Medicine
  - Admissions (2020-2021 Student Catalog, pg. 75)
  - Graduation Requirements (2020-2021 Student Catalog, pg. 80)

1.C.5	The institution engages in an effective system of assessment to evaluate the quality of learning in its programs. The institution recognizes the central role of faculty to establish curricula, assess student learning, and improve instructional programs.

The University established a process and annual cycle for assessing students learning outcomes in Fall of 2017. With the adoption of the NWCCU Standards 2020, the University is reviewing the process whereby assessment of academic programs occurs at the institutional level. All Roseman students are enrolled in graduate programs (MBA, MSN, PharmD, DMD, Orthodontic Residency) or a Bachelors completion program (Bachelor of Science in Nursing). Roseman offers no general education and has no non-degree seeking students. Each of our programs are accredited by accrediting bodies specific to that profession and each was granted the maximum accreditation term following its most recent accreditation evaluation. The standards and requirements of these bodies specify the form of assessment processes used by each program by necessity, and all of the programmatic accreditors require assessment of achievement of student learning outcomes as part of their accreditation standards. **Figure 3** displays the accreditation schedule of reports and site visits for our regional and programmatic accreditors for the period 2020-2025.

Figure 3

Program/ Accreditor	Fall 2020	Spring 2021	Fall 2021	Spring 2022	Fall 2022	Spring 2023	Fall 2023	Spring 2024	Fall 2024	Spring 2025
Roseman/ NWCCU	Year Seven -EIE Report and Visit		Year One Report				Mid-Cycle Report and Visit			
MD / LCME		Submit letter of application		Submit self-study to LCME		Expected LCME Site Visit				
PharmD/ ACPE							Self-Study Report and Site Visit			
DMD/CODA						Self-study Report and Site Visit				
AEODO/CODA						Self-study Report and Site Visit				
BSN-NV & UT/CCNE							Report and Site Visit			
MSN/FNP/CCNE		Report and Site Visit								
DNP/CCNE					Report and Site Visit					

- Roseman University is accredited by NWCCU (Northwest Commission on Colleges and Universities).
- The MD program of College of Medicine will fill with the Liaison Committee on Medical Education in Spring 2021.
- The PharmD program in the COP (College of Pharmacy) are accredited by ACPE (Accreditation Council for Pharmacy Education).
- Programs in the CODM (College of Dental Medicine) in NV (AEODO) and UT (DMD) are accredited by CODA (Commission on Dental Accreditation).
- The MSN Program is seeking accreditation from CCNE (Commission of Collegiate Nursing Education).
- The DNP Program is seeking accreditation from CCNE (Commission of Collegiate Nursing Education).
- AEODO = Advanced Education in Orthodontics and Dentofacial Orthopedics

The process established in Fall of 2017 included identification of Institutional Student Learning outcomes (ISLOs). The four Roseman ISLOs are as follows:

- Students will demonstrate the requisite knowledge and skills of an entry-level professional.
- Students will demonstrate attitudes and behaviors consistent with the norms and ethics of his/her profession.
- Students will demonstrate effective communication skills.
- Students will be able to evaluate, analyze, and apply information to make evidence-based decisions and solve problems.

For each of the academic programs, these ISLOs were then mapped to programmatic outcomes as part of the SLO assessment process. This mapping is displayed in **Appendix 7** for each of the academic programs. After a few iterations and generation of reports, a concern arose that this process was effectively adding an additional layer of assessment to those that have been ongoing and recognized as effective by the programmatic accreditors within all academic programs. This concern was shared with the Commission in November of 2018 in Town Hall discussions and communications in November of 2018. In short, the mapping of ISLOs and layering them onto established outcomes within each profession did not lead to a clearer understanding how changes and improvements may be implemented. On the other hand, sharing of assessment processes among academic programs did provide value but that value may be more easily obtained with the looser structure than that established previously. Establishing a structure that optimizes the value of sharing practices while minimizing the additional workload on academic programs that are already rigorously assessed is the challenge currently being discussed at the institutional level. Assessment processes within the BSN, PharmD and DMD programs will be discussed in Section 1.C.7.

Regarding the role of faculty, faculty at Roseman has the responsibility for the design, revision, approval and implementation of program curricula. Didactic curriculum for each college and program are updated each year by each College's curriculum committee to include the latest contents in didactic and clinical instruction. The functions of this Committee are to develop recommendations concerning curriculum, academic content revisions, pre-requisites for each block of instruction, requirements of the curriculum, requirements for the professional degree, and matters related to improvement in instruction. All such recommendations are submitted to the faculty within the respective College for approval by vote. Additionally, each College's Curriculum Committee, monitors assessment data to ensure student outcomes are being integrated and maintained throughout the entire curriculum. This review has resulted in quality improvement in block content, duration and scheduling over the years. Furthermore, each committee has approved additions to the curricular content when assessment results showed areas needing improvement. Each college's curriculum committee is composed of faculty and student representatives and is chaired either by a faculty member of the college (for College of Nursing, College of Dental Medicine and MBA program) or by the Assistant/Associate Dean for Academic Affairs (for College of Pharmacy). Student membership provides important input to committee discussions and decisions from the student perspective that promotes open communications between students and faculty.

1.C.6	Consistent with its mission, the institution establishes and assesses, across all associate and bachelor level programs or within a General Education curriculum, institutional learning outcomes and/or core competencies. Examples of such learning outcomes and competencies include, but are not limited to, effective communication skills, global awareness, cultural sensitivity, scientific and quantitative reasoning, critical analysis and logical thinking, problem solving, and/or information literacy.

Roseman University does not offer General Education courses for its undergraduate program, the Bachelor of Science in Nursing (BSN). Roseman degree-pathways leading to the BSN are classified as bachelors completion programs and any students entering a BSN (either BSN or ABSN pathway) must have completed the prerequisite postsecondary courses, including General Education, that make an applicant eligible for admission into the program. Information regarding prerequisite courses and admissions requirements can be found under Standard 1.C.4.

1.C.7	The institution uses the results of its assessment efforts to inform academic and learning-support planning and practices to continuously improve student learning outcomes.

As noted in section 1.C.5, each of the academic programs establishes an assessment process in conjunction with the needs of the profession and standards of the programmatic accreditors that accredit these programs. This section will include brief descriptions of the assessment process used in the BSN, PharmD, and DMD programs with examples of improvements enabled by their process.

BSN Program

Each of the BSN Program SLOs is mapped to a variety of external guides. The BSN Program was developed and implemented to reflect The Essentials of Baccalaureate Education for Professional Nursing Practice (AACN, 2008*)* and *Quality and Safety Education for Nurses* (*QSEN) Competencies* (QSEN, 2018). The professional guidelines and competencies are clearly evident in all courses. Students who individually meet course and clinical objectives have successfully mastered The Essentials of Baccalaureate Education for Professional Nursing Practice (AACN, 2008) and can integrate the QSEN competencies at a novice nurse generalist level. Curriculum and professional guidelines are reviewed bi-annually.

The College of Nursing Curriculum Committee meets monthly to evaluate, review, and approve new courses and curriculum change proposals from faculty. Approved proposed curriculum changes then go to the faculty council for discussion and vote. Proposals passed by the faculty council vote are adopted into the curriculum. This ensures continual improvements to teaching-learning practices.

The faculty uses data from assessment statistics within ExamSoft®, Assessment Technologies Institute (ATI®), and end of course and faculty evaluations completed by students to make informed decisions concerning the student's achievement of SLOs or to foster improvements in the course. Students also evaluate the didactic and clinical faculty, and data gathered are used to help foster improvements to clinical. Significant changes to courses, such as change in course outcomes, are not applied until a new cohort begins to prevent variation from the student handbook and expectations of the students.

One example of change induced by alumni feedback involves a post-graduate survey that is sent to all alumni six (6) months following graduation. The data relates to the employment, return to graduate school and maintaining competence after graduation. The data is compiled and used to enhance curriculum and teaching-learning practices in the program. After reviewing the survey data, it was decided to increase the amount of simulation experiences in the Maternal Newborn block.

An example of reviewing data for student learning outcomes is to review the assessment data from ExamSoft® assessments to evaluate and aggregate student performance on the tagged items identified as measuring the program SLOs **(See Table 1)**.

Table 1. Aggregate Student Performance on Items Tagged with SLOs by Academic Year

	Communication	Evidence-Based Practice	Health Information	Patient Centered Care	Professionalism	Safety and Quality
2015-2016	90.37%	86.78%	86.95%	88.23%	89.63%	90.34%
2016-2017	91.30%	89.81%	90.41%	90.08%	90.38%	90.72%
2017-2018	92.39%	91.59%	91.60%	91.86%	91.14%	91.91%
2018-2019	92.41%	91.42%	91.60%	91.15%	90.83%	91.76%

A change made to the program related to evidence-based practice (EBP) (one of the programmatic SLOs) scores was to re-design the research course to begin a PICO (an evidence-based framework based on Patient, Intervention, Comparison and Outcome) project at the beginning of the class, working through the process with a presentation at the end. After this change, aggregate student performance on EBP items improved (see Table 1). In another change, the Leadership block was changed to utilize the ATI/Sigma Theta Tau Clinical Nurse Leader certificate modules to impart the information; allowing students to obtain the certificate at the conclusion of the course requirements.

PharmD Program

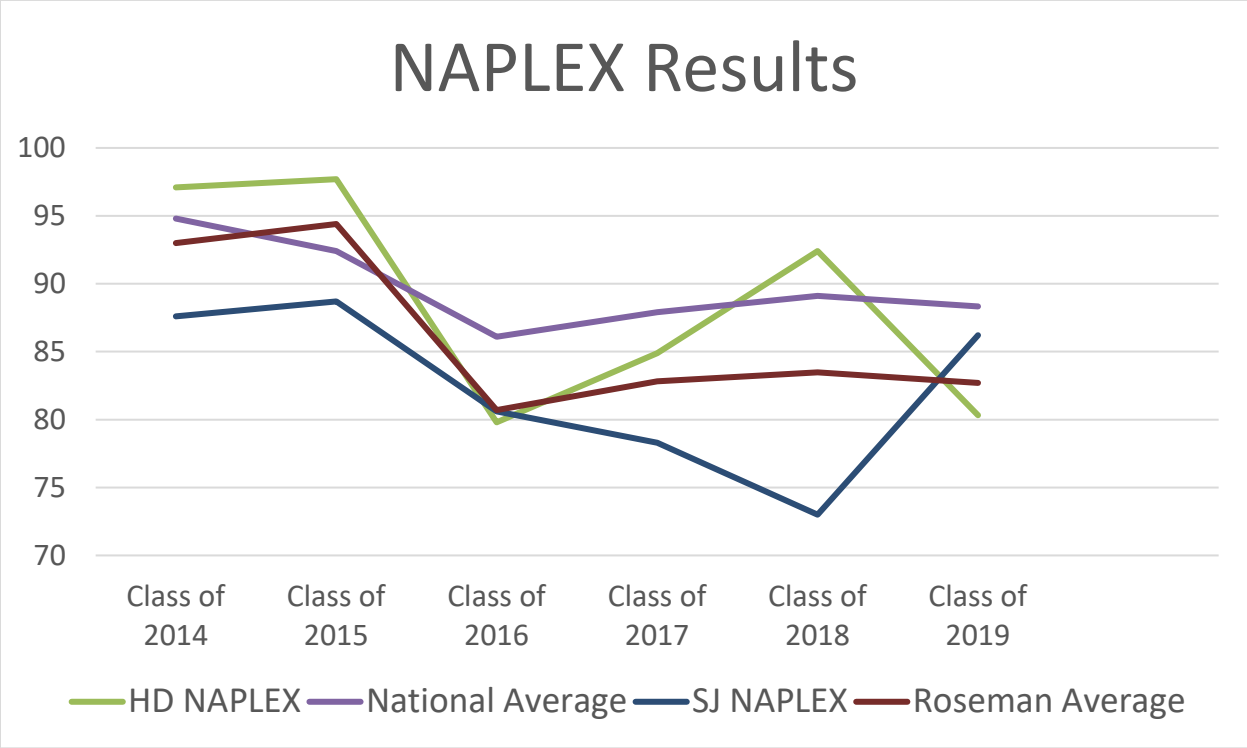
Programmatic assessment within the College of Pharmacy is led by the Assistant Dean of Assessment. This doctoral degree program undergoes a robust accreditation by the American Council of Pharmacy Education (ACPE) to ensure appropriate student learning. In 2015 it was granted the maximum extension (8 years) on its accreditation cycle. All aspects of the curriculum including didactic learning outcomes, assessment questions, skills-based activities and clinical rotation outcomes are mapped to college and university programmatic goals as well as the most current ACPE Standards. A multifaceted approach is employed to ensure data from students, faculty, administration, and external stakeholders including alumni, preceptors and employers is included in the programmatic assessment process. Data analyzed throughout this process includes: student performance on both written and skills-based exams; student performance on clinical rotations; student evaluations of teaching and precepting; on-time graduation rates; attrition rates; board pass rates on the North American Pharmacist Licensure Examination (NAPLEX); job placement rates for graduates; and survey data collected for this program and compared

to national and peer institutions every three years by the American Associations Colleges of Pharmacy (AACP). The majority of these data points are also reported to AACP for review on an annual basis and are published on their national website against all other colleges of pharmacy. Items falling 5% or more below national and select peer-institution benchmarks for AACP reporting metrics are flagged by the Office of Assessment, shared with faculty, and designated to appropriate college committees or administrators to be reviewed and addressed.

Formal college committees (i.e. Assessment Committee, Curriculum Committee, Faculty Development Committee, Experiential Committee, Academic Performance and Standards Committee, etc.) comprised of student, faculty, and administrative membership receive annual charges from the Dean to evaluate and act upon data from the various listed sources. Procedures for each committee, including process for approval of changes are presented in the College of Pharmacy By-Laws, which were reviewed and approved by all faculty in June of 2020. Administrators and some faculty hold appointments on multiple committees to ensure communication across committees like Curriculum and Assessment. These committees report back findings, create action plans to address areas of concern, and work collaboratively to ensure our mission of preparing competent, caring, ethical pharmacists is met. The Assessment Committee will compile these findings/action plans/outcomes and will analyze implemented changes for effectiveness or further review.

An example of how the College of Pharmacy has used assessment data and outcomes to drive change is the analysis and action-planning that has occurred with respect to aggregate student performance on the North American Pharmacy Licensure Examination (NAPLEX). The College of Pharmacy tracks NAPLEX passing data continuously and has set thresholds of 1) an aggregate first-time passing rate of 90% for absolute and 2) at or above the national % passing for relative as “meets expectations”. Additionally, the College of Pharmacy tracks passing rate by campus to identify if disparities exist in outcomes based on which campus a student attended. **Figure 4** below depicts passing rates both nationally and for Roseman students.

Figure 4. Performance of Roseman PharmD Graduates on NAPLEX 2014-2019.



It should be noted that in 2016 the structure and passing criteria for NAPLEX changed and since 2016, the average first-time passing rate for Roseman students has fallen below the national average. Disaggregating the results by campus shows variable performance year over year. To address this issue, the students were advised to use the Pre-Naplex exam as a tool to assess their degree of readiness for the NAPLEX. Survey data collected in the spring of 2019 identified many students were not utilizing this tool, either due to lack of awareness or cost. To follow up, the College of Pharmacy focused intervention efforts during academic year 2019-2020 in improving first time passing rates on the NAPLEX. In addition to revising curricular content and delivery in PHAR 699 Capstone, the College of Pharmacy appropriated funds to provide all students the Pre-NAPLEX exam at a cost of $120 per students. Every graduating student was also provided an individualized NAPLEX planning session with a faculty member. During these meetings, faculty members were able to provide advice and guide students on how to best prepare based on individualized needs of each student including their Pre-NAPLEX performance. Preliminary results for the Class of 2020 that capture the effect of these interventions may be available by the time of the schedule site visit in October.

DMD Program

The University has defined several ISLOs Student Learning Outcomes as described in Section 1.C.5. These outcomes are reflected in specific CODM student Learning outcomes. The specific CODM learning outcomes that we assess also reflect the competencies expected of DMD graduates by The Commission on Dental Accreditation (CODA). The outcomes, both university and program specific, are provided in **Appendix 8** along with their method of assessment. Outcomes are reported for initial assessments. Subsequent reassessments allowed all students to pass blocks that require 90% threshold.

Also included in **Appendix 8** are the student learning outcome rubrics, an example of the clinical case presentation rubric, the faculty student assessment form, the student self-assessment form, and Clinical Practice Team end of block student evaluation/assessment form. The summary given in **Appendix 8** shows the adaptation to incorporate the ISLOs but does not show the full depth and breadth of assessment processes for the DMD program. Presentation of outcomes and analysis of disaggregated data for the DMD program is presented in the section on Standard 1.D.2.

1.C.8	Transfer credit and credit for prior learning is accepted according to clearly defined, widely published, and easily accessible policies that provide adequate safeguards to ensure academic quality. In accepting transfer credit, the receiving institution ensures that such credit accepted is appropriate for its programs and comparable in nature, content, academic rigor, and quality.

Roseman University transfer policies, including transfer credit policies, are published in the University Catalog (see p. 28, 40, 49, 61 and 80). Because of the block system and the highly integrated nature of the didactic components of each curriculum, the University will consider requests for transfers on an individual basis. Each academic program is responsible for establishing and assuring the academic quality of their own transfer credit policies. For example, the College of Nursing has decided that only previous coursework meeting the course requirements for NURS 300 through NURS 303 of Roseman's nursing curriculum will be considered for transfer. The College of Nursing's Curriculum Committee reviews transfer course content for comparability with Roseman's nursing courses. A nursing student must have earned a 90% or higher grade in the course to be considered for review. In contrast, the College of Dental Medicine does not grant transfer credits and dental students who earned academic credits at another College of Dental Medicine, like any other prospective student, must apply to the first-year class.

1.C.9	The institution's graduate programs are consistent with its mission, are in keeping with the expectations of its respective disciplines and professions, and are described through nomenclature that is appropriate to the levels of graduate and professional degrees offered. The graduate programs differ from undergraduate programs by requiring, among other things, greater: depth of study; demands on student intellectual or creative capacities; knowledge of the literature of the field; and ongoing student engagement in research, scholarship, creative expression, and/or relevant professional practice.

Roseman University offers four graduate degree programs and one post graduate certificate program. All are in keeping with the institution's mission of educating healthcare professionals and advancing healthcare education through its innovative and unique mode of instruction. The graduate programs at Roseman University are:

- Master of Business Administration
- Master of Science in Nursing/Family Nursing Practitioner
- Doctor of Pharmacy
- Doctor of Dental Medicine
- Advanced Education in Orthodontics and Dentofacial Orthopedics/MBA (AEODO/MBA) residency (certificate) program

Both the graduate and post graduate programs require students to demonstrate didactic and clinical knowledge in their respective fields. As evidenced by the curriculum for each program, the graduate and post graduate programs require and provide a deeper level of knowledge, improve critical thinking and reasoning skills and clinical experience than is provided in an undergraduate program.

1.D Student Achievement

1.D.1	Consistent with its mission, the institution recruits and admits students with the potential to benefit from its educational programs. It orients students to ensure they understand the requirements related to their programs of study and receive timely, useful, and accurate information and advice about relevant academic requirements, including graduation and transfer policies.

Students are required to meet specified prerequisites before they can enroll in any of Roseman University's degree programs. These prerequisites can be found in the University Catalog and the webpages specific to each program. The course of study for each program is highly structured. While students may choose a limited number of elective courses within each program, the majority of the coursework is already determined for the student upon enrollment.

At the beginning of each academic year, each academic program conducts orientation sessions for all matriculating students. The orientation programming includes extensive reviews of the respective programmatic Student Handbooks, and sessions with representatives from the Facilities, Technology Services, and Financial Aid units in addition to program administration and faculty to inform students of new or updated policies and procedures affecting them.

Academic expectations for continued enrollment are published in the Student Handbooks. The Student Handbooks outline the requirements for maintaining enrollment in the program and the processes to follow if a student wishes to file an appeal or grievance. Procedures for re-admittance are also outlined in the Student Handbooks.

Graduation requirements and transfer polices are specific for each program and are described in each Student Handbook and the University Catalog on the University website https://www.roseman.edu/students/registrar/student-catalog-handbooks/.

1.D.2	Consistent with its mission and in the context of and in comparison with regional and national peer institutions, the institution establishes and shares widely a set of indicators for student achievement including, but not limited to, persistence, completion, retention, and postgraduation success. Such indicators of student achievement should be disaggregated by race, ethnicity, age, gender, socioeconomic status, first generation college student, and any other institutionally meaningful categories that may help promote student achievement and close barriers to academic excellence and success (equity gaps).

With the adoption of the NWCCU Standards 2020 and Roseman's selection to be evaluated under these new standards in the current cycle, the University has begun to review its indicators of student achievement in disaggregated form. In the current report, data are disaggregated by gender, ethnicity,

and age. Data are reported per program (BSN (BSN and ABSN), PharmD and DMD). Data are not reported for the MBA program which is scheduled for a teach out, the AEODO program (all residents have completed the program and passed the Boards at a 100% rate since 2011) or the MSN/FNP program that does not have any program completion data as the program is in its first year.

As a university that is relatively small, private and health sciences and graduate-program focused, Roseman has connected with similar universities in the region and established a mini-consortium to collectively identify more indicators and methods of disaggregation that most meaningfully measure student achievement. Representatives from Rocky Mountain University of Health Professions, University of Western States and Pacific Northwest University of Health Sciences have teamed up with Roseman to identify indicators and benchmarks that are suitable for institutions in this subgroup. Preliminary meetings were held in the Spring of 2020 and efforts of the group will continue going forward.

As a first attempt to identify potential equity gaps, data was disaggregated for each program to identify the composition of each class in each program by gender, ethnicity and age and then to identify completion rates within their program using the same disaggregation. Data are then displayed longitudinally for the period from 2015 through the most recent year of completion. A representative graph displaying gender composition of BSN, PharmD, DMD and classes in shown in **Figure 5**.

Of note in **Figure 5** is the significant increase in female students in the DMD program from the Class of 2017 to the Class of 2018. The Class of 2018 (that matriculated in 2014) establishes a new baseline wherein the percentage of female students has been between 45% and 50% since that time. Gender composition of PharmD and DMD programs has remained rather steady with ranges of 52-58% female and 69-78% for PharmD and BSN programs, respectively.

A full analysis of this disaggregation of class composition and completion rates can be reviewed in **Appendix 9**. The composition of each class by gender, age and ethnicity is included in that analysis and compared with national data. For program completion rates, those analyses that have identified equity gaps or potential equity gaps will be discussed within this section. Due to the exceedingly high completion rates within the DMD program (~97% of higher), no substantial disaggregation analysis of completion rates was performed.

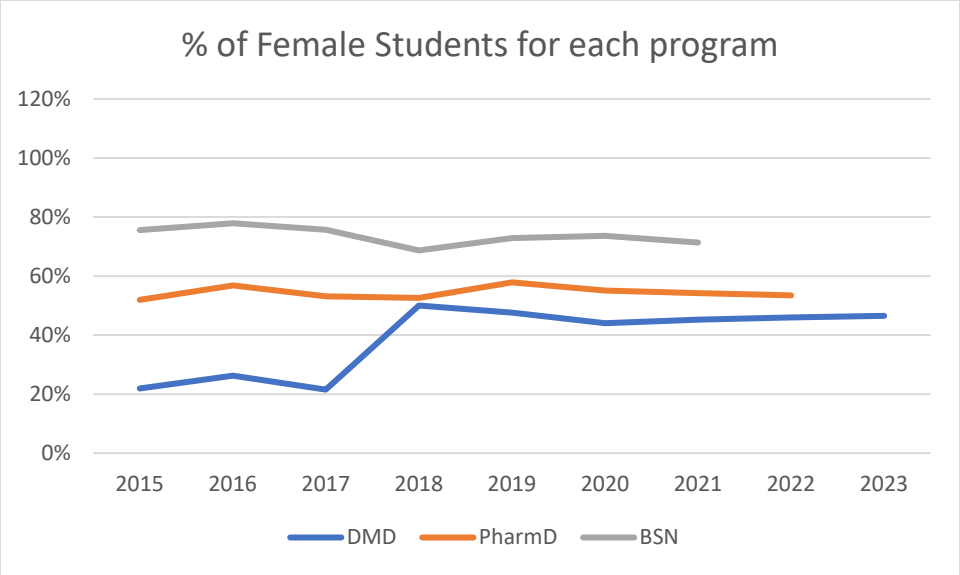
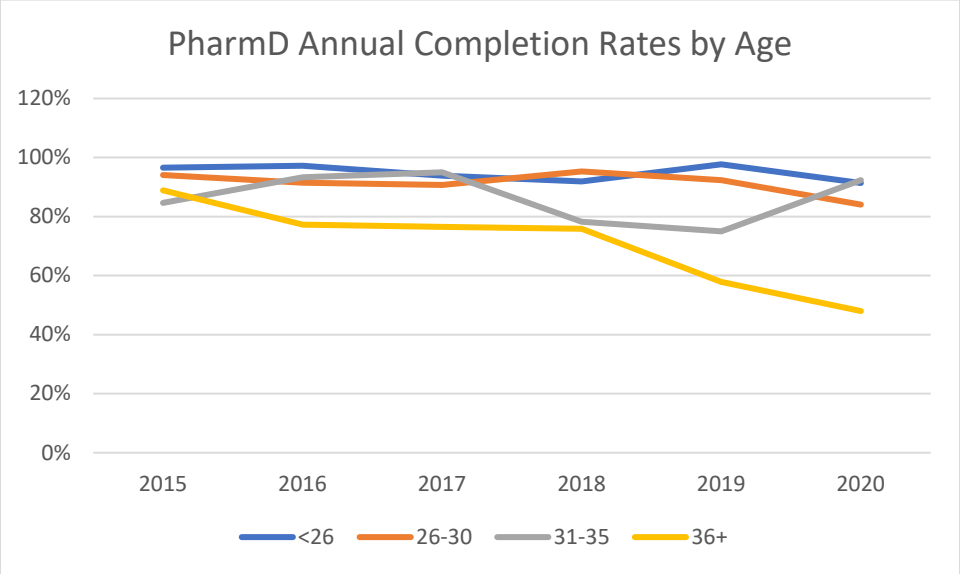


Figure 5. Percentage of female students per year per program. Years shown are year of graduation for a given class.

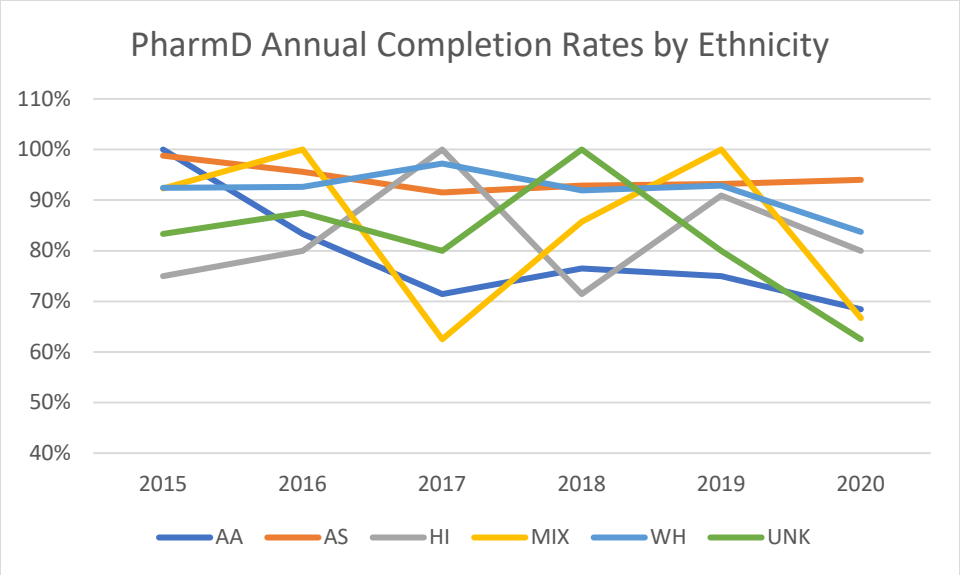
A further analysis of outcomes within the DMD program is provided in **Appendix 10**.

PharmD Completion Rates



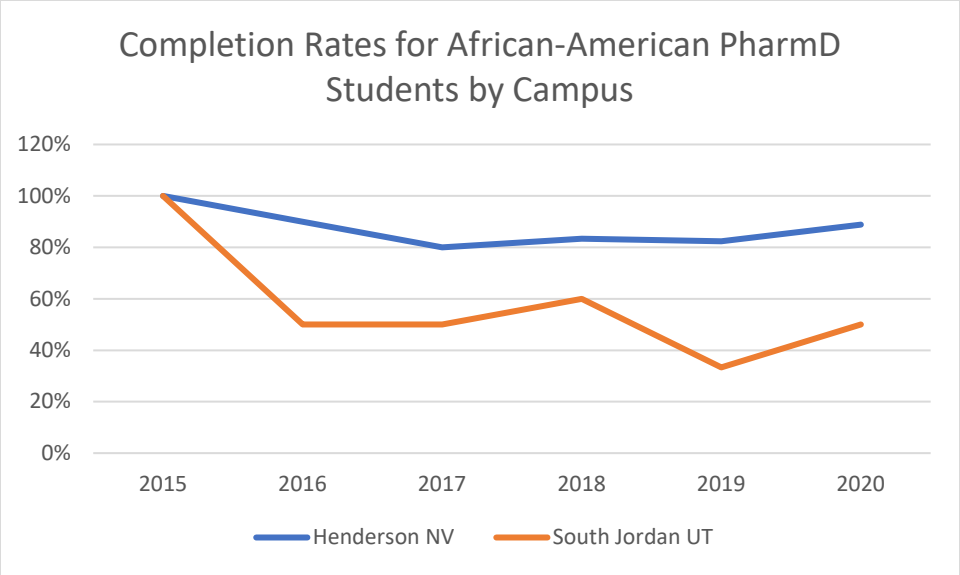
	<26	26-30	31-35	36+
2015	97%	94%	85%	89%
2016	97%	91%	93%	77%
2017	94%	91%	95%	76%
2018	92%	95%	78%	76%
2019	98%	92%	75%	58%
2020	91%	84%	92%	48%

Figure 6. Percentage of students that complete the PharmD program by age. Years shown are year of graduation for a given class.



	AA	AS	HI	MIX	WH	UNK
2015	100%	99%	75%	92%	92%	83%
2016	83%	96%	80%	100%	93%	88%
2017	71%	92%	100%	63%	97%	80%
2018	76%	93%	71%	86%	92%	100%
2019	75%	93%	91%	100%	93%	80%
2020	68%	94%	80%	67%	84%	63%

Figure 7. Percentage of students that complete the PharmD program by ethnicity. Years shown are year of graduation for a given class. AA= African American AS=Asian HI = Hispanic or Latino Mix = 2 or more races WH= White UNK = Unknown

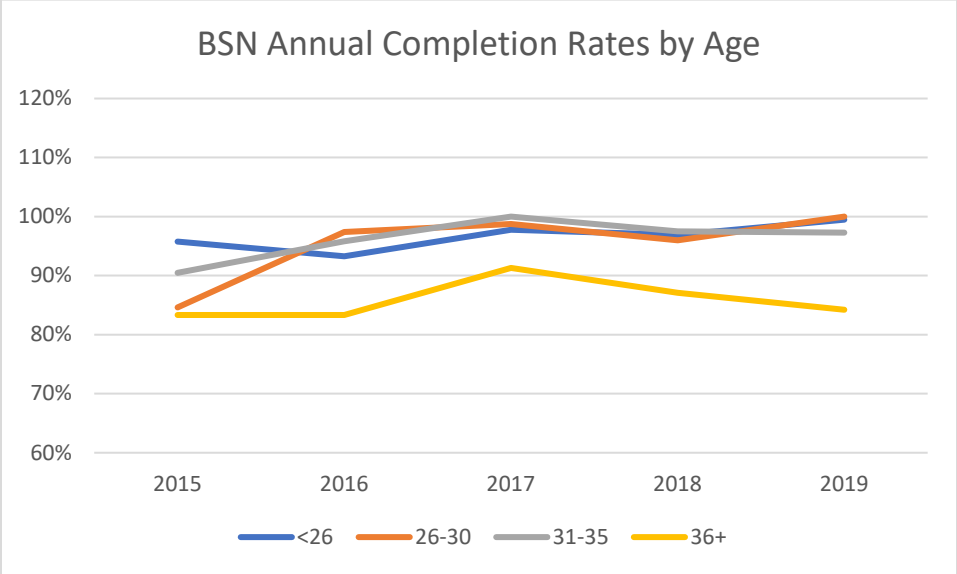


	Henderson NV	South Jordan UT
2015	100%	100%
2016	90%	50%
2017	80%	50%
2018	83%	60%
2019	82%	33%
2020	89%	50%

Figure 8. Percentage of African-American students that complete the PharmD program by campus. Years shown are year of graduation for a given class.

The largest gap identified for any analysis performed was that for the PharmD program completion rates when disaggregated by age. As displayed in **Figure 6**, students of 36 years of age or higher consistently complete the program at a lower rate. In terms of ethnicity, African-American students have completed the PharmD program at lower rate (see **Figure 7**) with completion rates between 70% and 80% since 2017. Further disaggregating the data by campus shows clearly that African-American students at the Henderson campus have outperformed those at the South Jordan campus. This is displayed in **Figure 8**. Completion rates for African-American students at the Henderson campus has never been below 80% over this timeframe. For the Class of 2020 in Henderson, African-American students completed the program at 89% in line with the class as a whole. In South Jordan, completion rates have been very low over the 5-year period given. Over that six-year time period only 12 of 24 students have completed the program. While the total number of PharmD African-American students at the South Jordan campus is low (ranging from 2-10 students per class in South Jordan), these outcomes are of concern and merit additional analysis and attention. Of note, in the graph of **Figure 7**, students of unknown ethnicity have had highly variable outcomes in terms of completion. This variability is at least somewhat attributable to the low number students in this category. The total number of students in this category ranges from 5 to 8 students. A similar attribution can be made for the high variable outcomes seen for students of mixed ethnicity.

BSN Completion Rates



	<26	26-30	31-35	36+
2015	96%	85%	90%	83%
2016	93%	97%	96%	83%
2017	98%	99%	100%	91%
2018	97%	96%	98%	87%
2019	99%	100%	97%	84%

Figure 9. Percentage of students that complete the BSN program by age. Years shown are year of graduation for a given class.

As with the PharmD program, an equity gap has been identified for students age 36 years or older **(Figure 9)**. Further investigation into program performance beyond completion rates did not provide any further insight into the source of this gap. In general, it is encouraging that overall passing rates for the program are very high. Graphs and Tables for BSN completion rates disaggregated by gender and ethnicity can be viewed in **Appendix 9**. Analysis of this data did not identify any equity gaps.

Summary and Future Directions

The disaggregated data presented herein represent a first attempt identifying equity gaps and have focused on traditional indicators of student achievement. All programs have consistently reported Completion Rates, Board Passing Rates, and (to the extent obtainable) Job Placement Rates. For example, the BSN program outcomes can be viewed at https://nursing.roseman.edu/explore/why-roseman/ (under "Graduate Preparation"). It has been a consistent goal for all Roseman programs to exceed national averages as measured by these indicators. Generally, the University has been highly successful in promoting student achievement by these measures.

Within this preliminary analysis, equity gaps have been identified. There is evidence that students over the age of 35 have not been achieving the level of success attained by their younger peers within the PharmD program and to some degree in the BSN program. Analysis is ongoing to identify possible causes associated with this disparity and with that solutions that can be implemented to close this gap. Also within the PharmD program, the performance of African-American students has been below that of class averages in most years studied. A more detailed analysis of this disparity has been presented herein and identified a disparity in outcomes between campuses. Strategies for addressing these gaps and the processes in development for identification of meaningful indicators that support efforts to further student achievement will be discussed below in Section 1.D.4.

1.D.3	The institution's disaggregated indicators of student achievement should be widely published and available on the institution's website. Such disaggregated indicators should be aligned with meaningful, institutionally identified indicators benchmarked against indicators for peer institutions at the regional and national levels and be used for continuous improvement to inform planning, decision making, and allocation of resources.

Analysis of disaggregated data in class composition and completion rates for BSN, PharmD and DMD programs can be found as **Appendix 9**. This current analysis will be augmented with additional indicators after a consensus is achieved within the University and with input from the consortium described above in 1.D.2. When fully developed these indicators will be updated annually and posted publicly on the University website.

1.D.4	The institution's processes and methodologies for collecting and analyzing indicators of student achievement are transparent and are used to inform and implement strategies and allocate resources to mitigate perceived gaps in achievement and equity.

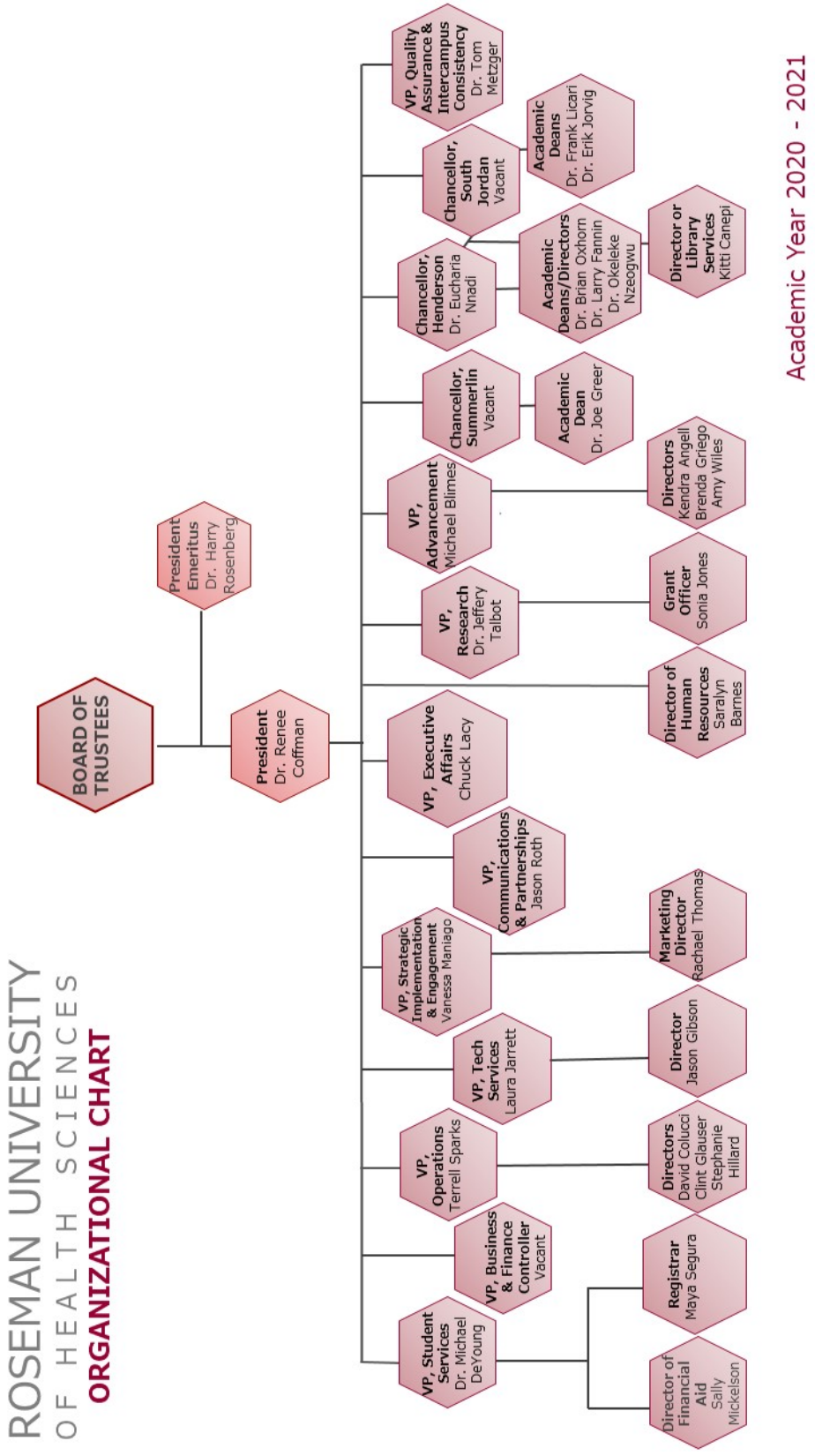
With the adoption of the new standards, the University is engaging in external and internal outreach to identify additional meaningful indicators that provide the most effective input for identifying areas for improvement and assessing institutional effectiveness. External outreach has consisted of connecting with three peer institutions in the Northwest region. As small, private institutions with a primary focus in healthcare education programs and among those, mostly graduate programs, this group has met on several occasions and begun the process of mapping out a variety of indicators. Over 40 indicators have been preliminarily identified. These include traditional academic indicators as well as a variety of socioeconomic status indicators. The process or sorting through this set of potentially useful indicators is ongoing. Internally, similar efforts are going on within academic programs. Notably, the College of Pharmacy has begun to establish a unified database that will provide a single source for collecting and analyzing all indicators of student achievement. In the College of Dental Medicine, a variety of tools and dashboards for analysis of student. While the content of these analyses is often program-specific, the software, data sources, and framework of analysis can be shared with all programs. At the university level, all external and internal efforts are being brought together to capture best practices from each group. A University committee is being formed to oversee this process. Included on this committee are members of the College of Medicine administration. The Senior Executive Dean for Diversity, Equity and Inclusion and the Associate Dean for Assessment and Evaluation from the College of Medicine joined Roseman in June and July of 2020, respectively. Their presence represents a welcome infusion of expertise in these key areas.

Conclusion

Roseman University of Health Sciences submits this Year Seven Evaluation of Institutional Effectiveness report at a pivotal time in its history. As Roseman celebrates its 20th Anniversary as an institution, it remains vigilant of the dynamic environment in which it operates. Based on a comprehensive, systematic and inclusive review of the educational and healthcare landscapes, the University has adopted a new Mission Statement and Strategic Plan in 2020. The Mission Statement reflects the expanding mission of the University including the expansion of clinical healthcare services but also renews its commitment to the provision of high quality educational programs. The Strategic Plan clearly articulates the operational areas and strategic initiatives that will lead to continued success and, through its annual cycle of review, enables the flexibility needed for appropriate adaptation. The Strategic Planning and Implementation Lifecycle is designed to provide a framework assessing and improving institutional effectiveness.

With the adoption of the 2020 Standards, the University continues to refine its assessment processes with the aim of improving student learning and student achievement. Each of the academic programs has robust ongoing assessment activities guided by standards and specialized accrediting bodies within their respective professions. At the university level, the programs are brought together to share best practices and tools that best assess student learning regardless of program. In addition, the university has begun to develop an enhanced capacity to address issues both with respect to data and analysis as well as diversity, equity, and inclusion. Preliminary efforts to identify meaningful indicators will soon converge on a more rich and systematic method to support student success and student achievement. It will be necessary to establish consensus on the panoply of potential indicators and variables that can be used in the analysis. While efforts have historically focused on traditional metrics and limited attempts to disaggregate data, the expansion is now being addressed with both inter- and intra- university efforts.

Appendix 1. Roseman University Leadership Organizational Chart



Appendix 2. MBA Teachout Plan

ROSEMAN UNIVERSITY
OF HEALTH SCIENCES

July 28, 2020

Selena Grace, Ph.D.
Senior Vice President
Northwest Commission on Colleges
and Universities
8060 165th Avenue, N.E., Suite 200
Redmond, Washington 98052

Dear Dr. Grace:

Roseman University of Health Sciences is hereby providing notification of a teach out for its MBA Program. The teach out plan was presented to the university's Administrative Council and approved on March 30, 2020. The Board of Trustees approved the plan on May 8, 2020. All current MBA students are also enrolled in professional programs (PharmD, DMD, and AEODO/MBA (Orthodontics residency)). All pathways for completion of the MBA program will continue to be offered. Starting with the 2020-21 academic year, the MBA program will no longer enroll new PharmD or DMD students. The MBA program will continue to be a requirement of the AEODO/MBA for residents enrolling in 2020 and 2021. The AEODO/MBA program is a 3-year program and thus MBA classes will continue until the 2023-24 academic year. The details of the teach out are provided in an attached document.

Please let me know if any additional information is needed.

Sincerely,

Renee Coffman, Ph.D., RPh
President

RC/js
Enclosures
cc: Dr. Thomas Metzger
Accreditation Liaison Officer
cc: Dr. Okeleke Nzeogwu, Director of MBA Program

HENDERSON CAMPUS | 11 Sunset Way | Henderson, NV 89014 | 702-990-4433
SUMMERLIN CAMPUS | 10530 Discovery Drive | Las Vegas, NV 89135 | 702-802-2841
SOUTH JORDAN CAMPUS | 10920 S. River Front Parkway | South Jordan, UT 84095 | 801-302-2600
roseman.edu

Appendix 2. (continued)

Proposed MBA Program Teach-Out Schedule & Financial Projections

Please find below,

Table 1. Teach-out schedule, July 2020 to May 2024 (AY 2020 to AY 2023)

This schedule preserves the existing structure for PharmD/MBA students in the classes of 2021 and 2022 as well as the DMD/MBA students in the classes of 2021, 2022, and 2023.

Residents in the AEODO/MBA Program will maintain schedules as in the past through Class of 2024.

Table 2. MBA Teach-out budget Financial Overview (PharmD, DMD, AEODO/MBA)

Table 3. MBA Program Teach-out budget

Appendix 2. (continued)

Proposed MBA Program Teach-Out Schedule & Financial Projections.....Page 2

Table 1: MBA Program Teach-Out Schedule (PharmD, DMD, AEODO)			
Cohort	**Class of ……../ Headcount/ Campus**		**Academic year/ Outstanding courses**
PharmD:	**2021**	**(6) HE** **(10) SJ**	-May - August 2020 (3.1/3.2 period). (18 credit hours.) MBA 610,620,645,630,670 and 690 (See note below) -November 2020 - March 2021 P3 Evening/Weekend Classes (accommodation for students affected by remediation) -Graduate May 2021
	2022	**(9) HE** **(10) SJ** **(7) HE** **(8) SJ**	-July - August 2020 (Pre-P2 year). (9 credit hours.) MBA 603, 605 and 602 (**Pre-2 year, AY2021**) -May - August 2021 (3.1/3.2 period). (18 credit hours.) MBA 610,620,645,630,670 and 690 (**P3 year, AY2022**) (See note below) -November 2021 - March 2022 P3 Evening/Weekend Classes (accommodation students affected by remediation) -Graduate May 2022
Notes: *Based on past experience, some students will have College of Pharmacy remediation and cannot take 3.1/3.2 scheduled MBA courses. Therefore, the actual headcount (**X**) will lower than the projected enrollment (~~Y~~) from the previous AY enrollment. The estimated decline in enrollment is 25%. However, if those remediation-affected students are local and can take Friday evening/Saturday courses, they can finish and graduate. University approval and minimum enrollment are required.			
DMD:	**2021**	**(9) SJ**	-May 2020 - March 2021. (21 credit hours.) MBA 603, 605,610,620,630,670 and 690. Each block meeting twice a week (Tuesday and Thursday, 5:30pm-9:30pm) and 1 Saturday (8am-1pm) for final assessment. -Graduate May 2021
	2022	**(6) SJ**	-September 2021 - March 2022. (12 credit hours.) MBA 620,630,670 and 690. Each block meeting twice a week (Tuesday and Thursday, 5:30pm-9:30pm) and 1 Saturday (8am-1pm) for final assessment. -Graduate May 2022
	2023	**(5) SJ**	-August 2020 - December 2020. (9 credit hours.) MBA 603,605 and 610. Each block meeting twice a week (Tuesday and Thursday, 5:30pm -9:30pm) and 1 Saturday (8am-1pm) for final assessment. -September 2022 - March 2023. (12 credit hours.) MBA 620, 630, 670 and 690. Each block meeting twice a week (Tuesday and Thursday, 5:30pm-9:30pm) and 1 Saturday (8am-1pm) for final assessment. -Graduate May 2023
Notes:			
AEODO:	**2021**	**(10) HE**	18 credits. 615,620,630,645,670 and 690
	2022	**(10) HE**	*39 Credits (13 courses).
	2023	**(10) HE**	*39 Credits (13 courses).
	2024	**(10) HE**	*39 Credits (13 courses).
Notes: The proposed schedule for the AEODO's is that R1s will take 1 course (3 credit hrs.), R2s will take 2 courses (6 credit hrs.) and R3's will take 10 courses (30 credit hrs.), for a total of 39 credits. AEODO is still considering changes and improvements. HE= Henderson, NV Campus SJ= South Jordan, UT Campus			

Appendix 2. (continued)

Proposed MBA Program Teach-Out Schedule & Financial Projections.....Page 3

Table 2: MBA Teach-Out Financial Overview (PharmD, DMD, AEODO)								
	AY 2020		AY 2021		AY 2022		AY 2023	
Cohort: Class of ... (Graduation year)	Enrollment (credit hours @ $710 per credit)	Revenue / cost	Enrollment (credit hours @ $710 per credit)	Revenue / cost	Enrollment (credit hours @ $710 per credit)	Revenue / cost	Enrollment (credit hours @ $710 per credit)	Revenue / cost
PharmD, HE, 2021 PharmD, HE, 2022 P3 Evening/Wkd.	6 (18 credit hrs.) 9 (9 credit hrs.) 2 (9 credit hrs)	$76,680 $57,510 $12,780	7 (18 credits hrs.) 2 (9 credit hrs.)	$89,460 $12,780				
PharmD, SJ, 2021 PharmD, SJ, 2022 P3 Evening/Wkd.	10 (18 credit hrs.) 10 (9 credit hrs.) 3 (9 credit hrs.)	$127,800 $63,900 $19,170	8 (18 credit hrs.) 2 (9 credit hrs.)	$102,240 $12,780				
PharmD Tuition revenue		$357,840		$217,260				
DMD, 2021 DMD, 2022 DMD, 2023	9 (21 credit hrs.) 5 (9 credit hrs.)	$134,190 $31,950	6 (12 credit hrs.)	$51,120	5 (12 credit hrs.)	$42,600		
DMD Tuition revenue		$166,140		$51,120		$42,600		
AEODO, 2021 AEODO, 2022 AEODO, 2023 AEODO, 2024	10 (18 credit hrs.) 10 (6 credit hrs.) 10 (3 credit hrs.)	$127,800 $42,600 $21,300	10 (30 credit hrs.) 10 (6 credit hrs.) 10 (3 credit hrs.)	$213,000 $42,600 $21,300	10 (30 credit hrs.) 10 (6 credit hrs.)	$213,000 $42,600	10 (30 credit hrs.)	$213,000
AEODO Tuition revenue		$191,700		$276,900		$255,600		$213,000
Fees (IT & Graduation)		$6,200		$4,500		$2,000		$1,000
Tuition & Fees Revenue (total)		$721,880		$549,780		$300,200		$214,000
PharmD Adjunct cost	24 blocks @ $6000 each	$144,000	18 blocks @ $6000 each	$108,000				
DMD Adjunct cost	10 blocks @ $6000 each	$60,000	4 blocks @ $6000 each	$24,000	4 blocks @ $6000 each	$24,000		
AEODO Adjunct cost	9 blocks @ $6000 each	$54,000	13 blocks @ $6000 each	$78,000	12 blocks @ $6000 each	$72,000	10 blocks @ $6000 each	$60,000
Full-time Employees (2) Compensation (a)		$150,998		$155,528		$160,194		$165,000
Part-time Admin (2) Compensation (b)		$47,586		$49,014				
Enrollment Coordinator Compensation (c)		$67,671		$69,701				
Part-time Director (d)		$80,000		$80,000		$80,000		
Payroll Expense (total)		$604,255		$564,243		$336,194		$225,000
Notes: a) Throughout the teach-out, one full-time faculty member will be in South Jordan and one full-time administrative assistant in Henderson (at $146,600 total annual compensation (AY 2019), with 3% increase per year starting AY 2020). b) Two part-time administrative assistants (South Jordan and Henderson) until June 2022 (at $46,200 (AY 2019) with 3% annual increase starting AY 2020). c) One Recruitment, Admissions and Enrollment coordinator until June 2022 (at $65,700 (AY 2019) with 3% annual increase starting AY 2020). d) One part-time director until June 2023 (at $80,000 per year).								

Appendix 2. (continued)

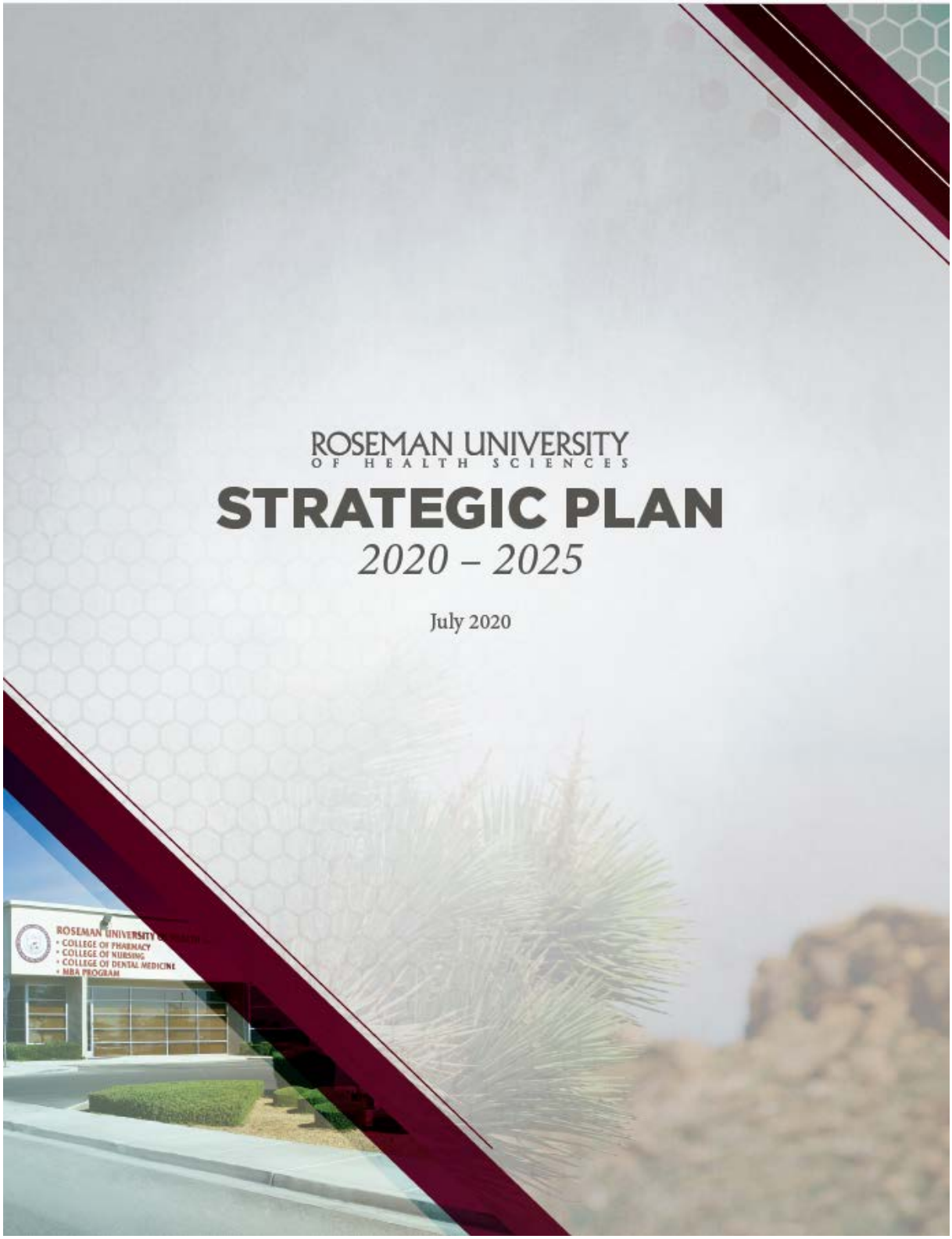
Table 3: MBA Program Teach-Out Budget				
	AY 2020	AY 2021	AY 2022	AY 2023
Tuition & Fees (total) Revenue (from Table 3):	$721,880	$549,780	$300,200	$214,000
EXPENSES (from Table 1, except payroll expense):				
Payroll Expense (total, from Table 3)	$604,255	$564,243	$336,194	$225,000
Professional fees	$2,500	$2,500	$2,500	$2,500
General & Administrative	$10,000	$10,000	$10,000	$10,000
Program costs	$3,500	$3,600	$16,700	$3,800
Travel, recruitment & Training	$0.00	$0.00	$0.00	$0.00
Dues & subscriptions	$2,986	$2,986	$2,986	$2,986
Repairs & Maintenance	$0.00	$0.00	$0.00	$0.00
Interest Expense/Bank Fees	$0.00	$0.00	$0.00	$0.00
Other Expense	$2,105	$2,105	$2,105	$2,105
Graduation, Convocation, and Student Programs	$200	$200	$200	$200
Scholarship Expense*	$4,000	$3,000	$2,000	$1,000
Total Expenses	$629,546	$588,634	$372,685	$247,591
Surplus/(Deficit)	$92,334	($38,854)	($72,485)	($33,591)

Proposed MBA Program Teach-Out Schedule & Financial Projections.....**Page 4**

Accreditation related considerations:

- Current IACBE accreditation extends to **April 2023.**
- The last PharmD/MBA cohort will graduate in **May 2022** (AY 2021) and any overflow (students affected by their COP remediation) will finish online during AY 2022 (and possibly finish **May 2023**). (As stated in the Catalog, after matriculation, students have up to seven years to complete their outstanding requirements by taking the outstanding courses elsewhere if they have met the residency requirement.)
- The last DMD/MBA will graduate **May 2023** (assuming no remediation overflows as in the past).
- AEODO/MBA residents starting this summer, July 2020, will graduate **May 2023**. However, AEODO plans to enroll another class starting July 2021, which will graduate, **May 2024**.
- Based on communication with IACBE VP for Accreditation and Compliance, given the current MBA enrollment, the Program can proceed with the IACBE accreditation reaffirmation schedule provided: Application for Reaffirmation due: September 1, 2021; Draft Self-Study due Mid-September 2022; Final Self-Study due Mid-November 2022; Site visit: Early-mid January, 2023; and Board of Commissioners decision: April 2023.
- IACBE does not review or accredit certificate programs. Once the teach-out is finished and no MBA students are enrolled, IACBE would be notified at that time and the program accreditation will be terminated.

Appendix 3. Roseman University 2020-2025 Strategic Plan



Appendix 3. (continued)

BACKGROUND

As Roseman University of Health Sciences celebrates its 20th anniversary and extraordinary growth since its inception as the Nevada College of Pharmacy, the Institution has reached a critical inflection point.

In anticipation of Roseman's 2015 Five-Year Strategic Plan's set expiration in 2020, the University embarked on a two-year-long process that created a platform for the University community and Board of Trustees to process and reflect on the Institution's evolution, mission fulfillment, and critical market factors shaping the higher education and healthcare landscapes.

More specifically, it offered the opportunity to regularly convene and review key data being collected that reflect institutional success, whether it be the results of the Annual Employee Survey, student learning outcomes data from our Student Learning Outcomes Committee, reports from the colleges and their deans, or unit-specific overviews. This process provided the opportunity to bring together various points of view, internal and external research and allowed for creative visioning and solutions-oriented brainstorming while looking ahead to the future of the Institution.

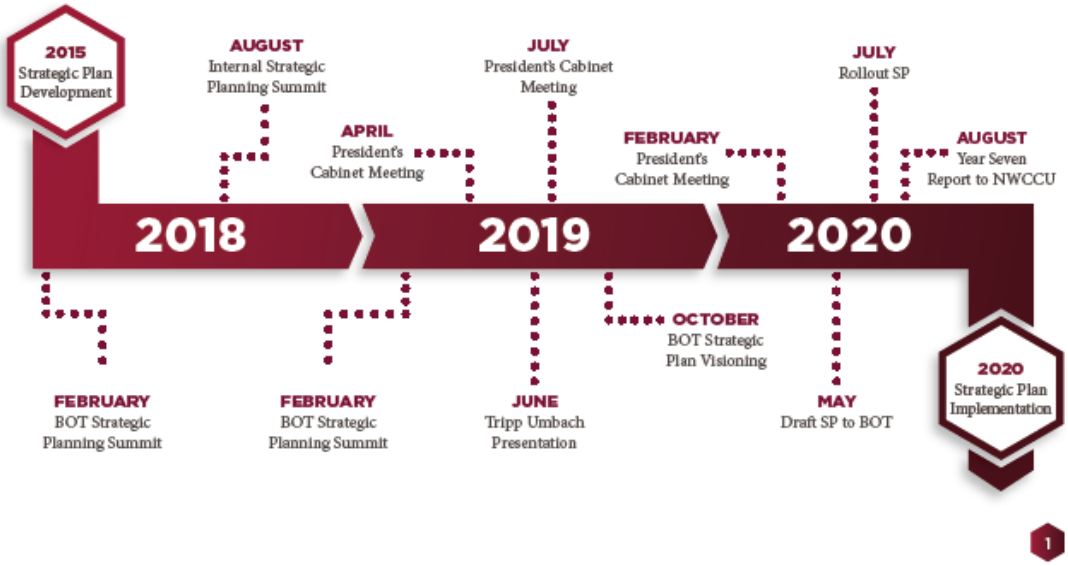
UNIVERSITY STRATEGIC PLANNING AND IMPLEMENTATION PROCESS (SPIP)

This process was formalized in February 2018 and allowed for an iterative, data-driven approach in evaluating institutional success and mission fulfillment. Perhaps more importantly, it allowed the University community to increase its communication, plan holistically, and break down barriers that can exist between colleges and units.

The SPIP included the Board of Trustees, the Administrative Council, Program Deans, and Chairs of the 2015 Strategic Plan Implementation Group. As the SPIP advanced into 2019, it was felt that broader University participation and input was needed to operationalize the new Strategic Plan and allow for a forum that could address issues, challenges, and opportunities. The President's Cabinet was formed and included Administrative Council, all deans and directors, as well as chairs of the 2015 Strategic Plan Implementation Groups.

Figure 1 graphically represents Roseman's three-year SPIP.

FIGURE 1



Appendix 3. (continued)

ACKNOWLEDGEMENTS

The Strategic Planning and Implementation process, SPIP, has included the work and collaboration of the Administrative Council, program deans, the chairs of the SPWG's, the Board of Trustees, and the President's Cabinet. All have been integral in the development of the 2020 Strategic Plan. It is important to take a moment to appreciate all those that have contributed to this work. Please see Exhibit A for a full list of all those that participated in the development of this plan.

AN EXPANDING MISSION: *A New Mission Statement*

In its 20-year history, Roseman has evolved from its start as the Nevada College of Pharmacy with its first cohort of 36 students, to a multifaceted health sciences institution offering multiple professional programs, patient care through its growing clinical footprint, research, and community engagement through its community programs, educational offerings, and events. In the last five years, Roseman has seen dramatic expansion of its assets, partnerships and reach into the communities it serves.

As such, the mission statement needed to reflect Roseman's new dimensions as well as represent its future path forward in meeting the diverse and changing needs of our students, employees, patients, and community. Through our SPIP process, and input from our President's Cabinet, a revised mission statement was presented, revised after input, and approved by Administrative Council in April 2020. It was then shared with our Board of Trustees, which approved it at their May 2020 meeting.

NEW MISSION STATEMENT

Roseman University of Health Sciences advances the health and wellness of the communities we serve by educating current and future generations of health professionals, conducting research and providing patient care. We actively pursue partnerships and affiliations that are aligned with our mission, work to create an environment that fosters both internal and external collaboration to achieve optimal outcomes, and are committed to responsible fiscal management in all endeavors.

OPERATIONAL AREAS

With a new mission statement as our guiding star, the University then sought to "break apart" or disaggregate the mission into six operational areas, each with its own "Target Goals" which provides a vision for what could be accomplished in the next five years.

ADVANCING THE STRATEGIC PLAN

Each year, an Annual Implementation Plan (AIP) outlines specific action items/deliverables that permit Roseman to advance its mission strategically based on institutional priorities. The AIP allows Roseman to be nimble and respond to new information, while still anchoring annual initiatives to the operational areas derived from the mission. In addition to the action items/deliverables, the AIP identifies individuals or groups who have the primary responsibility for achieving the specified outcomes ("Working Groups") and includes timelines for delivery. Finally, in order to clearly tie the AIP back to the mission, each action item in the plan identifies which of the six operational areas the action item supports, noting that any one action item may support several operational areas.

Progress on the AIP will be monitored quarterly via reports to the President's Cabinet and the Board of Trustees. These progress reports will then inform the annual planning meeting used to create the next year's AIP. In this manner, Roseman can advance its Strategic Plan iteratively and dynamically, while still accomplishing mission-based objectives.

Appendix 3. (continued)

STRATEGIC PLAN

With the mission statement as its foundation, the Strategic Plan identifies the six operational areas and associated goals. These, in turn, drive the Strategic Initiatives that comprise the Annual Implementation Plan (*see Figure 2*). Thus, the plan is organized in a framework that allows us to easily and readily understand how each component is interrelated and interdependent. Most importantly, the framework permits mission fulfilment by turning the Mission Statement into action and accomplishment in a way that is not static and that permits flexibility and growth over time.

FIGURE 2

MISSION STATEMENT DISAGGREGATION

Roseman University of Health Sciences advances the health and wellness of the communities we serve by ***educating current and future generations of health professionals, conducting research*** and ***providing patient care.*** We actively ***pursue partnerships and affiliations*** that are aligned with our mission, work to create an environment that ***fosters both internal and external collaboration*** to achieve optimal outcomes, and are committed to ***responsible fiscal management*** in all endeavors.

SIX OPERATIONAL AREAS

- Educating current and future generations of health professionals
- Conducting Research
- Providing Patient Care
- Pursuing complementary partnerships and affiliations
- Fostering internal and external collaboration
- Responsible fiscal management

3

Appendix 3. (continued)

TAKING THE PLAN FORWARD—PLAN STEWARDSHIP

Roseman's Strategic Plan 2020 is critical in focusing the Institution on its priorities moving into the next decade. Roseman will continue to grow and evolve and will be faced with new challenges and opportunities. This plan is meant to be a framework with clear priorities, objectives and goals, deliverables and timelines, but it is also meant to be flexible enough to adapt to unforeseen changes and new information.

As it becomes operationalized, the Strategic Plan will serve as a tool to engage the entire University community holistically and meaningfully.

As we move into AY 20-21, executing the plan will depend on the stewardship of each of the AIP Working Groups. AIP Working Group leaders will be responsible for reporting progress quarterly to the President's Cabinet and those reports will be collated into a summary report presented at the quarterly meetings of the Board of Trustees, culminating in an annual report in May each year.

Between March and April each year, a Strategic Planning Summit will be held. Using the progress reports, institutional data, and input from academic and service units and the Board of Trustees, existing strategic initiatives will be evaluated, and potential new institutional priorities will be discussed. The objective of the Summit will be to review and refine the target goals for each operational area, and to identify Strategic Initiatives for the next fiscal year. The ultimate outcome of the Summit will be the construction of the AIP for the upcoming year.

The Strategic Planning Lifecycle and Implementation plan is depicted in Figure 3.

FIGURE 3

4

Appendix 3. (continued)

OPERATIONAL AREA 1

Educating Current and Future Generations of Health Professionals

Target Goals

- Create more "on-ramps" and opportunities to engage future students through all parts of the educational journey
- Expand current programmatic offerings to meet industry and market demand
- Ensure our programs are current to keep pace with market forces and workforce demands
- Enable and increase student success so they may learn, earn, and serve their communities post-graduation.
- Support a culture of diversity and inclusion so that all students may succeed
- Redesign current academic programs to permit interprofessional education
- Become a model for innovative health professions education

OPERATIONAL AREA 2

Conducting Research

Target Goals

- Expand university infrastructure to support strategic growth in research capabilities and productivity
- Establish and expand research graduate programing
- Develop research-focused relationships with academic, industry, clinical, and government partners
- Enhance the scholarly reputation and visibility of Roseman University

OPERATIONAL AREA 3

Providing Patient Care

Target Goals

- Establish a successful Academic Health System that becomes the gold standard for exceptional patient care, teaching and learning
- Establish a comprehensive clinical footprint that becomes the gold standard for exceptional patient care, teaching and learning

5

Appendix 3. (continued)

OPERATIONAL AREA 4

Pursuing Complementary Partnerships and Affiliations

Target Goals

- Develop a new schema of interrelated partners that strengthen institutional capabilities, diversifies revenue sources and solidifies our competitive position

OPERATIONAL AREA 5

Create An Environment That Fosters Both Internal And External Collaboration

Target Goals

- Focus on most optimal, high-quality Culture Building, Community Engagement, and Philanthropic initiatives that further drive internal and external collaboration and partnership
- More deeply root Roseman into the communities it serves
- Broaden and deepen public awareness and understanding of Roseman

OPERATIONAL AREA 6

Responsible Fiscal Management

Target Goals

- Diversify revenue sources
- Reduce dependence on tuition revenue
- Increase institutional efficiency with highly efficient workforce with optimal mix of talent, skills and experience to support growth
- Explore entrepreneurial opportunities

6

Appendix 3. (continued)

2020-2021 ANNUAL IMPLEMENTATION PLAN

Strategic Initiative: ***College of Medicine***

- **Create plan to admit first class of students in 2024 including:**
  - Financial proforma and hiring plan
  - Philanthropy plan and goals
  - Resource inventory and gap analysis
  - Curricular framework
  - Timelines for LCME and NWCCU accreditation and NCPE licensure
- **Working Group:**
  - Leader: Dr. Joe Greer
  - COM leadership team
  - University leadership, service unit leadership as needed
- **Deliverable:**
  - Written plan that takes the COM through its first graduating class, submitted for Board approval by February 2021
- **Operational Areas: 1 – 6**

Strategic Initiative: ***College of Graduate Studies***

- **Finalize plans for initial graduate program degree offerings for Board approval including:**
  - Five-year Financial proforma
  - Resource inventory and gap analysis
  - Curricular plans for degrees offered
  - Timelines for NWCCU accreditation and NCPE licensure
- **Working Group:**
  - Leader: Dr. Jeff Talbot
  - Graduate Studies Council
  - University leadership, service unite leadership as needed
- **Deliverables:**
  - Written plan for Board approval by November 2020
  - NWCCU accreditation and NCPE licensure submission complete early 2021
  - Admission of first class in July 2021
- **Operational areas: 1, 2, 4 – 6**

7

Appendix 3. (continued)

Strategic Initiative: ***Interprofessional Education (IPE)***

- **Implement interprofessional education curriculum across all programs**
- **Working Group:**
  - Co-leaders: one member from each academic program
  - Geri Crane, Susan Nguyen, Leiana Oswald, Delos Jones, Tom Hunt, Anna Ferri, Angela Chu, Susan Watson, Lisa Harper, David Anderson, David Robinson, Sam Dyal, other faculty TBD, one student and one resident from each year as an ad hoc student/resident focus group
- **Deliverables:**

Creation of a plan that:

  - Identifies immediate needs
  - Identifies areas of overall and common curriculum
  - Identifies external collaborators
  - Articulates the vision for Roseman IPE within the context of the SPMLM
  - Includes content on the Social Determinants of Health
  - Develops a longer-term, longitudinal IPE curriculum
- **Operational Areas: 1, 5**

Strategic Initiative: ***Nurture Existing and Develop New Pipelines for Prospective Students***

- **Create a comprehensive plan for an Institutional Pipeline Initiative**
  - Plan to identify near-term and long-term targets
  - Plan to create strategies for pipeline development at elementary, middle school, high school and undergraduate students
  - Plan to develop articulation agreements with partner higher education institutions
- **Development of a specific marketing plan aimed at attaining enrollment targets for AY 21-22**
- **Working Group:**
  - Leader: Vanessa Maniago
  - Deans, Admissions leaders for each program, Jason Roth
- **Deliverables:**
  - Written Institutional Pipeline Initiative Plan to Administrative Council for endorsement by first quarter of 2021
  - Marketing plan to Administrative Council for endorsement by Sept. 2020
- **Operational Areas: 1, 4 – 6**

Appendix 3. (continued)

Strategic Initiative: ***Complete College of Pharmacy "Deep Dive"***

- **Finalize data gathering and analysis for all operational aspects of the College of Pharmacy**
- **Working Group: COP "Deep Dive" Team**
- **Deliverable:**
  - Final report on committee's work including data analysis, trend analysis, and recommendations to Admin Council and the Board by February 2021
- **Operational Areas: 1, 5**

Strategic Initiative: ***Continue to Advance Understanding and Utilization of the Roseman Six Point Mastery Learning Model Internally***

- **Complete and perhaps repeat institution-wide faculty development offerings on the Six Point Mastery Learning Model (SPMLM)**
- **Create SPMLM badging/microcredentialing system for faculty with achievements tied to promotion**
- **Working Group:**
  - Leader: TBD
  - Academic Affairs/Faculty Development leadership in each College, other interested faculty
- **Deliverables:**
  - Execution of six faculty development programs, one on each element of the SPMLM by the end of the academic year
  - Creation of badging/microcredentialing system that is incorporated as a criterion for promotion in each College for final approval by the Administrative Council in May 2021
- **Operational Areas: 1, 5**

Strategic Initiative: ***Plan for a Center for Innovation in Healthcare Education***

- **Development of a proposal to launch a Center for Innovation in Healthcare Education which:**
  - Serves as a resource for and supports Roseman faculty in delivering the SPMLM in the classroom
  - Initiates research for peer-review and publication on the SPMLM both within individual academic programs and across programs
  - Has a strategy for exporting SPMLM expertise to other institutions as a revenue source
  - Has a five-year budget proforma which includes potential revenue sources, operating and salary expenses that cumulatively breaks-even by year five and that follows the "Policy to Establish a Center"
- **Working Group:**
  - Leader: TBD
  - Interested faculty from each academic program
- **Deliverable:**
  - Submission of budget and Center planning document to Administrative Council by May 2021
- **Operational Areas: 1 – 2, 4 – 6**

9

Appendix 3. (continued)

Strategic Initiative: *Roseman Dental Clinic at C4K*

- **Finalize plans to launch dental clinic by early 2021**
  - Identify resources to complete facility build-out
  - Three-year financial proforma
- **Working Group:**
  - Leaders: Dr. Frank Licari and Dr. Kris Munk
  - CODM leadership team, Facilities leadership team
  - University leadership team as needed
- **Deliverables:**
  - Written plan with budget for Board approval by November 2020
  - Clinic ready for patients in first quarter of 2021
- **Operational Areas: 1, 3 – 6**

Strategic Initiative: *Roseman Café at C4K*

- **Create plan to open and operate the Café in the Breakthrough Building**
  - Three-year financial proforma
- **Working Group:**
  - Leader: Terrell Sparks and Annette Logan
  - University leadership team as needed
- **Deliverables:**
  - Written plan with budget for Board approval by November 2020
  - Café operational by first quarter of 2021
- **Operational Areas: 4 and 6**

10

Appendix 3. (continued)

Strategic Initiative: ***Expand Opportunities for Education, Research, Patient Care and Entrepreneurial Endeavors through Partnership with Renown Health***

- **Define synergistic mission areas, identify priorities for execution, obtain support of both Boards to pursue formal partnership**
- **Working Group:**

Renown-Roseman Coordination Group:

- Tony Slonim, CEO, Renown
- Hector Boirie, Chief Strategy Officer, Renown
- Renee Coffman, President, Roseman
- Harry Rosenberg, President Emeritus, Roseman
- Execution teams comprised of individuals from each entity as needed

- **Deliverables:**
  - Creation of plan to collaborate on Nursing degree programs
  - Creation of plan to collaborate on MD program
  - Identification of other areas for collaborations with associated plans
  - Quarterly reports to the Boards of each entity
- **Operational Areas: 1 – 6**

Strategic Initiative: ***Continue to Build Infrastructure and Resources and Collaborations to Advance Research***

- **Create a five-year Research Strategic Plan**
- **Working Group:**
  - Leader: VP of Research
  - Researchers from each academic program, research staff
- **Deliverables:**
  - Five-year plan for research for approval by Admin Council during Spring 2021
  - Plan for development of research collaborations, including initiatives with Renown Health
- **Operational Areas: 1, 2, 4, 5**

Appendix 3. (continued)

Strategic Initiative: ***Sustain and Advance Institutional Financial Health***

- **Develop internal processes and plans that lead to multi-year financial planning based on institutional mission and priorities, diversification of revenue sources and entrepreneurial activities**
- **Working Group:**
  - Leaders: VP for Business and Finance, President
  - President Emeritus key members of Business Office team, other University administration as needed
- **Deliverables (*completed by end of fiscal year*):**
  - Reliable budget forecasting processes
  - Three-year budget proforma
  - Process for mission-based resource allocation
  - Plan to leverage institutional strengths and new partnerships to decrease reliance on tuition revenue
- **Operational Area: 6**

Appendix 3. (continued)

EXHIBIT A

Administrative Council

Dr. Renee Coffman, *President*
Dr. Chuck Lacy, *Vice President of Executive Affairs*
Dr. Eucharia Nnadi, *Chancellor,* Henderson Campus
Dr. Tom Metzger, *Vice President for Quality Assurance and Intercampus Consistency*
Dr. Michael DeYoung, *Vice President of Student Affairs*
Ken Wilkins, *Vice President of Business and Finance*
Terrell Sparks, *Vice President for Operations*
Dr. Jeffrey Talbot, *Vice President for Research/Dean,* College of Graduate Studies
Dr. Surajit Dey, *President of Roseman University Faculty Senate*
Jason Roth, *Vice President of Communications*
Laura Jarrett, *Vice President for Technology Services*
Michael Blimes, *Vice President of Philanthropy and Alumni Relations*
Saralyn Barnes, *Director of Human Resources*
Vanessa Maniago, *Vice President for Strategic Implementation and Engagement*
Dr. Joe Greer, Dean, College of Medicine

President's Cabinet

Dr. Renee Coffman, *President*
Dr. Harry Rosenberg, *President Emeritus*
Dr. Charles Lacy, *Vice President of Executive Affairs*
Dr. Thomas Metzger, *Vice President for Quality Assurance and Intercampus Consistency*
Terrell Sparks, *Vice President for Operations*
Ken Wilkins, *Vice President of Business and Finance*
Dr. Michael DeYoung, *Vice President for Student Affairs*
Jason Roth, *Vice President of Communications*
Laura Jarrett, *Vice President for Technology Services*
Dr. Jeffrey Talbot, *Vice President for Research/Dean, College of Graduate Studies*
Dr. Martin Lipsky, *Chancellor,* South Jordan Campus
Dr. Eucharia Nnadi, *Chancellor,* Henderson Campus
Dr. Frank Licari, *Dean,* College of Dental Medicine
Dr. Brian Oxhorn, *Dean,* College of Nursing
Dr. Larry Fannin, *Dean,* College of Pharmacy
Dr. Okeleke Nzeogwu, *Director,* MBA Program
Saralyn Barnes, *Director of Human Resources*
Kitti Canepi, *Director of Library Services*
Sally Mickelson, *Director of Financial Aid*
Dr. Surajit Dey, *Associate Professor of Pharmaceutical Sciences, President,* Faculty Senate
Dr. Casey Sayre, *Associate Professor,* College of Pharmacy
Dr. Catherine Oswald, *Associate Dean for Academic Affairs,* College of Pharmacy
Dr. David Rawlins, *Associate Professor,* College of Pharmacy
Dr. Tom Hunt, College of Medicine, *Chair of Dept. of Family Medicine*
Vanessa Maniago, *Vice President for Strategic Implementation and Engagement*
Jackie Seip, *Executive Assistant to the President*

Appendix 3. (continued)

Board of Trustees

Jason Glick, Chair, *Director of Pharmacy Services,* St. Rose Dominican Hospital
Diana Bond, *Chair Emeritus,* Consultant Pharmacist
David J. Dunn, Chair Elect, President of Kingsbridge Wealth Management, Inc.
Mark Howard, *Treasurer,* CEO Emeritus of Mountain View Hospital
Robert Talley, *Secretary,* Executive Director of Nevada Dental Assn.
Mary Greer, Pharmacy Consulting Services Group
Ron Memo, *Business Consultant*
Harvey Riceberg, *Consultant Pharmacist*
Holly Prievo, *Walgreens Healthcare Supervisor,* Las Vegas
Suzanne Cram, *Healthcare Consultant*
Dr. David L. Steinberg, *Physician*
Carlene M. Walker, *Former Utah State Senator*
John H. Rich, *Healthcare/Development Consultant*
Annette Logan, *President and CEO of Cure 4 the Kids Foundation*
Rick Smith, President and CEO of RDS Enterprises, LLC
Dr. Harry Rosenberg, President Emeritus

SPWG Chairs

Jason Roth, *Chair of Culture Working Group*
Dr. Casey Sayre, *Chair of Diversify Revenue Streams Working Group*
Mark Penn, *Former Chair of Academic Health Center Working Group*
Vanessa Maniago, *Chair of Center for Innovation in Health Care Education Working Group*

Appendix 3. (continued)

Appendix 4. Membership Roster of President's Cabinet

Dr. Renee Coffman, President

Dr. Harry Rosenberg, President Emeritus

Dr. Charles Lacy, Vice President of Executive Affairs

Dr. Thomas Metzger, Vice President for Quality Assurance and Intercampus Consistency

Terrell Sparks, Vice President for Operations

Ken Wilkins, former Vice President of Business and Finance

Dr. Michael DeYoung, Vice President for Student Affairs

Jason Roth, Vice President of Communications

Laura Jarrett, Vice President for Technology Services

Dr. Jeffrey Talbot, Vice President for Research/Dean, College of Graduate Studies

Dr. Martin Lipsky, former Chancellor, South Jordan Campus

Dr. Eucharia Nnadi, Chancellor, Henderson Campus

Dr. Frank Licari, Dean, College of Dental Medicine

Dr. Brian Oxhorn, Dean College of Nursing

Dr. Larry Fannin, Dean, College of Pharmacy

Dr. Okeleke Nzeogwu, Director, MBA Program

Saralyn Barnes, Director of Human Resources

Kitti Canepi, Director of Library Services

Sally Mickelson, Director of Financial Aid

Dr. Surajit Dey, Associate Professor of Pharmaceutical Sciences, President, Faculty Senate

Dr. Casey Sayre, Associate Professor, College of Pharmacy

Dr. Catherine Oswald, Associate Dean for Academic Affairs, College of Pharmacy

Dr. David Rawlins, Associate Professor, College of Pharmacy

Dr. Tom Hunt, College of Medicine, Chair of Dept. of Family Medicine

Vanessa Maniago, Vice President, Strategic Implementation and Engagement

Jackie Seip, Executive Assistant to the President

Appendix 5. Proposed Revised College of Pharmacy Programmatic Goals

DRAFT DOCUMENT Background information:

University Mission Statement:
Roseman University of Health Sciences advances the health and wellness of the communities we serve by educating current and future generations of health professionals, conducting research and providing patient care. We actively pursue partnerships and affiliations that are aligned with our mission, work to create an environment that fosters both internal and external collaboration to achieve optimal outcomes, and are committed to responsible fiscal management in all endeavors.

University Vision Statement:
Roseman University of Health Sciences aspires to be the first choice among "best in class" institutions of higher learning, universally recognized as an innovative, transforming force in health care education, and as a vibrant, stimulating place to work and learn.

College of Pharmacy Mission Statement
Roseman University of Health Sciences College of Pharmacy prepares students to become competent, caring, and ethical pharmacists; contributes to the profession through its commitment to scholarship; and provides patient centered care, while addressing the pharmacy-related needs of the community.

College of Pharmacy Vision Statement
Roseman University of Health Sciences College of Pharmacy aspires to lead the profession of pharmacy by developing faculty, staff, and student pharmacists who transform the community through exceptional pharmacy education, compassionate patient-centered care, interdisciplinary collaboration, and innovative scholarship.

<u>Original</u> COP Programmatic Goals (created before 2010):

01 - Demonstrate effective communication skills in counseling patients, and in interacting with other healthcare professionals, ensuring appropriate medication therapy outcomes.
02 - Retrieve, evaluate and disseminate evidence-based drug information through the use of technology and informatics serving as a medication therapy resource, and maintain a commitment to life-long learning.
03 - Apply basic and clinical science knowledge to review patient medication profile, and to identify, prevent and resolve medication-related errors and problems.
04 - Recommend prescription and over the counter medications based on knowledge of disease state management, interpretation of clinical laboratory values, adverse drug reactions, and drug interactions.
05 - Apply basic and clinical science concepts to substantiate or predict the role of medication therapy in disease state management resulting in improved patient outcomes.
06 - Procure, store, prepare and dispense medications accurately and time-efficiently using appropriate pharmacy management systems.
07 - Practice pharmacy as a patient advocate, following federal, state laws and regulations considering pharmacoeconomic principles to minimize the cost of pharmacotherapy.
08 - Maintain cultural competency by considering individual patient factors such as socioeconomic and spiritual beliefs that may affect medication therapy management in achieving optimal patient outcomes.

Appendix 5. (continued)

09 - Serve as a professional resource in promoting maintenance of good health and prevention of disease.

10 - Demonstrate core professional values such as ethics, integrity, responsibility and compassion.

EDIT BELOW HERE:

Proposed COP Programmatic Goals:

The ideal Roseman graduate should be able to:

1. Retrieve, evaluate, integrate, and apply evidence-based drug information through the use of technology and informatics in pharmacy practice.
2. Utilize knowledge accrued from relevant foundational and pharmaceutical sciences as the basis for patient care.
3. Evaluate patient- and population-based needs to prevent illness, and design, implement, manage, and optimize patient care in accordance with evidence-based medicine.
4. Demonstrate effective communication skills and techniques across a variety of platforms to design and deliver patient care and to communicate relevant medical information to patients and other healthcare professionals (stakeholders).
5. Relate and implement concepts of storage, packaging, handling, delivery systems, and disposal of pharmaceutical products.
6. Demonstrate proper techniques, procedures, and use of equipment for drug preparation, compounding, and administration of hazardous and non-hazardous, sterile and nonsterile products.
7. Practice pharmacy ethically while following federal and state laws and regulations.
8. Demonstrate knowledge in health systems, payer options, and pharmacoeconomic principles to evaluate drug therapy and health outcomes.
9. Advocate for patient care with consideration of cultural awareness and social determinants of health.
10. Incorporate strategies of professionalism, self-awareness, leadership, life-long learning, and innovation to drive advances in the pharmacy profession and to improve personal development

Appendix 6. Sample Block Plan for PHAR 410

PHAR 410 Block Plan
Fundamentals of Drug Action and Metabolism
Roseman University College of Pharmacy, Henderson Campus

Block Faculty

Dr. Thomas Metzger (Block coordinator): has a Ph.D. in Medicinal Chemistry and has done research in medicinal chemistry, molecular pharmacology, and molecular modeling. Email: tmetzger@roseman.edu Office Phone: 968-2013

Dr. David Rawlins: has a Ph.D. in Organic Chemistry from Stanford University. He has done medicinal chemistry research in the pharmaceutical industry in the therapeutic areas of oncology, immunology, ophthalmology, and metabolic disease. Email: drawlins@roseman.edu Office Phone: 968-1684

Dr. Arup Chakraborty: received his doctorate degree in chemistry from the University of Nebraska-Lincoln. His research work on protein synthesis, inflammation biology, cancer biology and cancer drug development resulted into 28 publications in different scientific journals. Email: achakraborty@roseman.edu Office Phone: 968-2014

ACPE Appendix 1 Domains Addressed in This Block

- Biochemistry
- Human Anatomy
- Human Physiology
- Immunology
- Clinical Chemistry
- Medicinal Chemistry
- Medical Microbiology
- Pharmaceutics/Biopharmaceutics
- Pharmacokinetics
- Pharmacology
- Toxicology

Block Content/Outcomes

Upon completion of this block the student will be able to:

Chemistry Review (Sept 17)

1. Locate and name functional groups, heterocyclic rings, and substituent groups on molecular structures of drugs.
2. Identify which groups are primarily hydrophilic (water soluble) and which are hydrophobic (fat or lipid soluble).

Appendix 6. (continued)

3. Identify ionizable groups on drug molecules.
4. Identify the 3 major categories of intermolecular forces and their relative strengths.
5. Recognize how hydrophobic interactions drive molecular aggregation, vesicle and micelle formation, and membrane sequestration.
6. Recognize how hydrophobic interactions and intermolecular forces affect the solubility of small molecules in aqueous solutions.
7. Predict the intermolecular forces or interactions in which a given molecule or functional group would be able to engage.
8. Identify the major classes of biomolecules according to their defining structural features and/or their primary function(s).
9. Identify which biomolecules are monomers, oligomers, and polymers for each of those classes that have them.
10. Identify the form in which the various classes of biomolecules are absorbed.
11. Identify which classes of biomolecules are stored as fuel, how and where they are stored, and how much is stored.
12. Identify which electrolytes are found primarily in plasma and which are found primarily inside cells.
13. Relate the intake of the various dietary components to their various roles in the body.

Acids/Bases & Acid/Base Disorders (Sept 18)

1. Identify the meanings of the terms 'strong acid' and 'strong base,' and calculate the pH of a strong acid or strong base, given its concentration.
2. Recognize the meaning of the term pK_a both mathematically and in words.
3. Calculate the percent ionization of a weak acid or base, given the pK_a of the molecule and the pH of the solution.
4. Calculate the ratio of a weak acid or base and its conjugate, given the pK_a of the molecule and the pH of the solution.
5. Given the pK_a of a molecule in solution and its percent ionization, or acid/base ratio, calculate the pH of the solution.
6. Given the pH of a molecule in solution and its percent ionization, or acid/base ratio, calculate the pK_a of the solution.
7. Given the pK_a of a weak acid or weak base, predict whether the protonated or the unprotonated form of the given molecule will have a greater effect on the pH of an aqueous solution
8. Recognize how changes in pH affect the solubility and absorption of an ionizable drug molecule.
9. Differentiate the variation of ionization with pH of amines and carboxylates graphically and with the Henderson-Hasselbalch equation.
10. Distinguish the role of acids and bases (i.e donor and acceptor) from the state of ionization of drugs.

Appendix 6. (continued)

11. Identify the most likely ionizable groups to be found in a drug molecule based on the salt formulation of the drug.
12. Predict the location(s) in the gastrointestinal tract where acids and bases would be charged, uncharged, and/or absorbed.
13. Identify mechanisms that assist in maintaining physiological pH.
14. Classify acid/base disorders based on their causes and the parameters that are affected by the disorder.
15. Identify examples of each type of acid/base disorder and examples of the cause of each both physiologically and with arterial blood gas values.
16. Recognize what is meant by 'compensation' in cases of acid/base disorders.
17. Identify the meaning of the term 'anion gap,' and calculate it, given blood concentrations of sodium, chloride, and bicarbonate.
18. Given an anion gap reference range, use the value of the anion gap to distinguish between different types of metabolic acidosis.

Amino Acids and Peptides (Sept 19)

1. Recognize the general structural features of the 20 standard amino acids.
2. Given the name or structure of one of the 20 standard amino acids, classify it as nonpolar, polar, aromatic, positively charged, or negatively charged.
3. Recognize how amino acids can act as pH buffers in the body.
4. Recognize the three-letter abbreviations of each of the standard amino acids.
5. Distinguish between essential, nonessential, or semiessential amino acids, and recognize why they are essential, nonessential, or semiessential.
6. Match selected drugs and biomolecules with the amino acids they are derived from, and vice-versa.
7. Recognize peptide and disulfide bonds.
8. Recognize how a peptide is named according to its amino acid sequence.
9. Recognize which end of a given peptide contains the amino terminus and which end contains the carboxy terminus.
10. Recognize what is meant by the isoelectric pH (pI) of amino acids, peptides, and proteins.
11. Predict the net charge of a protein or peptide, given its pI.
12. Identify the biological significance of selected peptides and the drugs derived from them.
13. Recognize that protein and peptide drugs cross membranes poorly and are readily digested in the GI tract.
14. Recognize several strategies for producing modified peptides with lower susceptibility to proteolysis and improved bioavailability.

Protein Structure and Function (Sept 20)

1. Define and identify the four different levels of protein structure: primary, secondary, tertiary, and quaternary.
2. Identify the intermolecular forces involved in maintaining each level of protein structure.

Appendix 6. (continued)

3. Recognize the meaning of the term 'denaturation,' and identify ways in which proteins are denatured.
4. Recognize the primary disruption(s) to protein structure and function related to sickle-cell anemia, prion diseases, and collagen disorders.
5. Recognize the structural and functional characteristics of oxygen transport (hemoglobin) and storage (myoglobin) proteins.
6. Recognize the meaning of the terms 'apoprotein,' 'holoprotein,' 'cooperativity,' and 'allostery.'
7. Recognize how changes in pH, carbon dioxide level, and 2,3-bisphosphoglycerate concentration affect the binding and release of O_2 by hemoglobin.
8. Identify the meaning of the term "Bohr Effect."
9. Identify the differences between HbF and HbA, and recognize how they are differentially affected by 2,3-bisphosphoglycerate.
10. Recognize how carbon monoxide binds to hemoglobin and affects its function.
11. Recognize how thalassemia affects the structure and function of hemoglobin.
12. Identify the events that occur in the sliding filament mechanism of muscle contraction, in their correct sequence.
13. Identify the structural and functional characteristics of the proteins involved in the sliding filament mechanism of muscle contraction.
14. Recognize how an increase of myoglobin and troponin in the blood can be used to diagnose cardiovascular disease.
15. Identify the structural and functional characteristics of immunoglobulin molecules (antibodies).
16. Recognize how an ELISA (Enzyme-Linked Immunosorbent Assay) works in point-of-care testing.

Enzymes: Classification, Kinetics and Control (Sept 23)

1. Recognize the structural and thermodynamic basis for the enzymatic rate enhancement of a biochemical reaction.
2. Recognize what is meant by the term "active site" and how the enzyme interacts with its substrate.
3. Recognize the importance of vitamins and minerals to enzymatic function.
4. Recognize how temperature and pH affect the rate of enzyme catalysis.
5. Identify the meanings of the terms maximum velocity (V_{max}) and Michaelis-Menten constant (K_m).
6. Determine V_{max} and K_m from a plot of initial velocity vs. substrate concentration for an enzyme catalyzed reaction.
7. Recognize how a(n) competitive, uncompetitive, noncompetitive/mixed, or irreversible inhibitor would change the K_m and V_{max} values for an enzyme catalyzed reaction.
8. Recognize the mechanisms by which competitive, uncompetitive, noncompetitive/mixed, or irreversible inhibitors inhibit enzyme reactions.
9. Classify selected examples of drugs as competitive, uncompetitive, noncompetitive/mixed, or irreversible inhibitors.
10. Identify how allosteric regulators affect a plot of initial velocity vs. substrate concentration and recognize the meaning of $K_{0.5}$.

Appendix 6. (continued)

11. Recognize how enzymes are regulated by the following methods: product inhibition, allosteric regulation, covalent modification, protein-protein regulation, zymogen cleavage, enzyme synthesis and degradation.
12. Given the reaction it catalyzes, classify an enzyme as a(n): oxidoreductase, transferase, hydrolase, lyase, isomerase, or ligase/synthetase.
13. Recognize the meaning of the term isozyme, and identify examples of isozymes.
14. Recognize how an increase in the blood concentrations of selected enzymes/isozymes can be used to diagnose disease.
15. Identify the disease states most likely to cause abnormally elevated blood concentrations of CK, CK-MB, LDH1, AST, ALT, ALP, and/or GGT.
16. Identify examples of therapeutic enzymes and predict their delivery route.

Drug Biotransformation (Sept 24)

1. Identify how a biotransformation reaction can enhance elimination of a foreign compound.
2. Identify the primary location of drug biotransformation.
3. Define and distinguish the terms “first pass effect,” “bioavailability,” and “clearance.”
4. Recognize the biological roles of the cytochrome P450 enzymes, and the most common type of biotransformation reactions they catalyze.
5. Identify the Phase I biotransformation reactions.
6. Recognize the meanings of the terms “enzyme induction” and “enzyme inhibition,” and identify how these processes may affect plasma levels of a drug.
7. Identify and apply the definitions for “AUC,” and “C_{max}.”
8. Identify the Phase II biotransformation reactions and the molecules or groups involved in these reactions.
9. Classify a biotransformation reaction as Phase I or Phase II.
10. Recognize the process that occurs when a drug undergoes enterohepatic recirculation, as well as the possible physiological complications that may result.
11. Identify the types of compounds most likely to undergo enterohepatic recirculation.
12. Identify the structural component of glutathione that enables the neutralization of potentially toxic substrates.
13. Identify the excretion product generated as a result of the metabolism of glutathione conjugates.
14. Recognize the definition of the term ‘prodrug.’
15. Recognize selected examples of prodrugs, and their reason(s) for being designed as prodrugs.
16. Identify how induction or inhibition of a prodrug-activating enzyme will affect plasma levels of the active form of the drug.

Molecular Targets and Signal Transduction (Sept 25)

1. Identify and classify the major protein classes of molecular targets for drugs.
2. Trace the main events that occur during a signal transduction event.
3. Describe various second messengers.
4. Distinguish between the different classes of ion channels and identify examples of each type.
5. Identify the features that distinguish ion pumps from ion channels.

Appendix 6. (continued)

6. Identify the structural features of G protein-coupled receptors (GPCRs) and their role in ligand recognition and signal transduction.
7. Identify the differences between G-proteins (including $G_{\alpha s}$, $G_{\alpha 1}$, and $G_{\alpha q}$) and GPCRs.
8. Trace the molecular events that lead to the breakdown of glycogen stimulated by epinephrine or glucagon.
9. Trace the molecular events leading to the activation of phospholipase C and downstream signaling.
10. Describe muscarinic acetylcholine receptors.
11. Predict the effect of agonists/antagonists on the adenylate cyclase and Ca^{2+}/phosphatidylinositol signal transduction pathways.
12. Summarize the roles of the following in a signal transduction pathway mediated by a GPCR:
    - first messenger
    - receptor
    - transducer
    - effector
    - second messenger
13. Recognize the structural features and roles of sodium and chloride in neurotransmitter transporters.
14. List examples of enzyme-linked receptors.
15. Define the term protein kinase and protein phosphatase and explain their role in signal transduction.
16. Describe receptor tyrosine kinase and identify its basic structural characteristics.
17. Describe the events following the activation the insulin receptor.
18. Describe the signaling events mediated through guanylate cyclase as they relate to nitric oxide.
19. Describe the role of phosphodiesterases in cell signaling.
20. Identify the types of ligands that have intracellular receptors and the role of the ligand-receptor complex with such receptors.
21. Identify how the pathways described can have an effect on muscle contraction.

Pharmacokinetic Terminology and Introduction to Pharmacodynamics (Sept. 26)

1. Define the following pharmacokinetic terms:
    - bioavailability
    - volume of distribution (V_d)
    - clearance
    - elimination of half-life ($T_{1/2}$)
2. Identify the following:
    - C_{max},
    - $T_{max,}$
    - area under the curve (AUC)

Introduction to pharmacodynamics:

3. Define the receptor and effector.
4. Recognize the significance of:
    - EC_{50} (potency)
    - K_i
    - E_{max} (efficacy)
    - quantal dose–response

Appendix 6. (continued)

5. Recognize the terms therapeutic window and therapeutic index (TI)
6. Recognize the distinguishing characteristics of:
   - agonists
   - partial agonists
   - reversible/irreversible antagonists
   - competitive/noncompetitive antagonists
7. Distinguish competitive and noncompetitive antagonists based on dose response curves.

Biological Membranes: Structure and Transport (Oct. 1)

The prokaryotic cell wall

1. Describe Gram negative and Gram positive bacterial cell walls and how they are synthesized.
2. Identify peptidoglycan synthesis as the target of the beta lactams.
3. Describe the use of clavulanic acid to overcome bacterial resistance to beta lactams.

Composition and architecture of membranes

4. Describe the fundamental structural components of biological membranes.
5. Identify the amphipathic structure of lipids and how hydrophobic interactions relate to membrane structure.
6. Recognize the driving forces responsible for membrane formation.
7. Describe micelle, liposome, and the inner/outer leaflets of the bilayer.
8. Identify the structures of following lipids:
   - fatty acid
   - triacylglycerol
   - phosphatidic acid
   - glycerophospholipid
   - ceramide
   - sphingolipid
   - cholesterol
9. Describe what is meant by membrane asymmetry.
10. Compare and contrast peripheral and integral membrane proteins.
11. Describe how a covalently linked lipid can anchor a protein to a membrane.
12. Describe what is meant by the fluid mosaic model.
13. Recognize processes that involve membrane fusion.

Solute transport across membranes

14. Recognize the role of osmosis and osmotic pressure in solute transport across biological membranes.
15. Describe the significance of the terms lipophilic and lipophobic as they relate to solute transport across a membrane.

Appendix 6. (continued)

16. Recognize how concentration gradients, physicochemical properties of a molecule, and membrane thickness influence the rate of diffusion (Fick's Law of Diffusion).
17. Describe the thermodynamics of the movement of a solute across a membrane.
18. Describe what is meant by electrochemical gradient.
19. Differentiate between:
    - simple diffusion
    - passive transport
    - facilitated transport (carriers and channels)
    - primary active transport
    - secondary active transport
    - ion channels
    - ion pumps
    - uniport, symport, and antiport
20. Recognize examples and mechanisms of solute transport systems.

Cellular Communication: Excitability and Electrochemical Transmission (Oct. 1)

1. Differentiate between juxtacrine, endocrine, paracrine, and autocrine cell signaling.
2. Describe the electrochemical basis of the resting V_m
3. Identify the events that result in the generation of an action potential in nerve cells including:
    - depolarizing stimulus
    - opening/closing of ion channel activation/inactivation gates
    - repolarization
    - hyperpolarization
    - return to resting V_m
4. Recognize the timing and changes in ion flux during an action potential.
5. Compare and contrast relative refractory period and the absolute refractory period
6. List the events in synaptic transmission.
7. Describe the propagation of an action potential at the neuromuscular junction.
8. Identify the role of calcium ions in the cardiac muscle action potential.

Instructional Strategies

A typical day in this block will be structured as follows:

1. Review and discussion of the previous day's material
2. Students individually take a quiz covering the previous day's material followed by review with faculty
3. Presentation of new material
4. Team activities
    - Problem solving activities

Appendix 6. (continued)

- Case studies/Clinical Applications

Assessment Design and Methods

Students will be given both formative and summative assessments. Summative assessment reviews will be item-based.

Formative Assessments

Formative assessments will occur as regularly scheduled quizzes. Students are expected to take each quiz individually as if it were a summative assessment (e.g. without the use of notes, slides, etc.). The objectives of these quizzes are to identify any particular areas of weakness so that they may be addressed in class prior to the summative assessment, and to give students an idea of what to expect for the summative assessment both in style and content. There are no points assigned to quizzes.

Summative Assessments

Assessment 1.2 is scheduled for Sept. 27 and covers material from block days 1 – 8 of PHAR 410. The point structure is designed to reflect the amount of class time each instructor has been assigned. An additional 5 percentage points will be added to an individual's assessment score if his/her team scores at least 95% on the team assessment. Reassessment 1.2 is scheduled for Sept. 30.

Assessment 1.3 scheduled for Oct. 11 covers material from block day 9 of PHAR 410 and block days 1 – 5 of PHAR 411. The point structure is designed to reflect the amount of class time each instructor has been assigned. An additional 5 percentage points will be added to an individual's assessment score if his/her team scores at least 95% on the team assessment. Reassessment 1.2 is scheduled for Oct. 14.

Textbooks and References

There is no recommended textbook. If you would like to read a text, please consult with a member of the block faculty and/or refer to the following list of Roseman Library holdings.

PHAR 410 Days 1-6:

- Essentials of organic chemistry. Dewick PM.
- Chemistry for pharmacy students. Sarker SD, Nahar L.
- Foye's principles of medicinal chemistry. Lemke TL, Williams DA, Roche VF, et al., eds.
- Lehninger principles of biochemistry. Nelson DL, Cox MM.
- Marks' basic medical biochemistry. Lieberman M, Marks AD.
- Chemistry. Burdge J.
- Remington: the science and practice of pharmacy. Beringer P, DeMarderosian A, Felton L, et al., eds.
- *Pharmacotherapy, a pathophysiologic approach. Dipiro JT, Talbert RL, Yee GC, et al., eds.
- Casarett and Doull's Toxicology, Klaassen ed.
- *Goodman and Gilman's The Pharmacological Basis of Therapeutics, Hardman ed.

Appendix 6. (continued)

PHAR 410 Days 6,7 and 9:

Bacterial cell wall structure, synthesis, and the beta lactams

- *Basic & Clinical Pharmacology, 11e, Katzung, Masters, and Trevor (Chapter 43: Beta Lactam & Other Cell Wall- & Membrane-Active Antibiotics)
- *Goodman & Gilman's The Pharmacological Basis of Therapeutics, 11e (Chapter 44: Penicillins, Cephalosporins, and Other β-Lactam Antibiotics)

Biological membranes

- *Harper's Illustrated Biochemistry, Murray, Granner, and Rodwell (Chapter 40: Membranes: Structure & Function)

Excitability and Electrochemical Transmission

- *Ganong's Review of Medical Physiology, Barrett, Barman, Boitano, and Brooks (Chapter 4: Excitable Tissue: Nerve)

Drug–Receptor Interactions and Signal Transduction

- *Basic & Clinical Pharmacology, 11e, Katzung, Masters, and Trevor (Chapter 2: Drug Receptors & Pharmacodynamics)

Pharmacokinetics and Pharmacodynamics

- *Goodman & Gilman's The Pharmacological Basis of Therapeutics, 11e (Chapter 1: Pharmacokinetics and Pharmacodynamics: The Dynamics of Drug Absorption, Distribution, Action, and Elimination)
- *Basic & Clinical Pharmacology, 11e, Katzung, Masters, and Trevor (Chapter 2: Drug Receptors & Pharmacodynamics)
- *Basic & Clinical Pharmacology, 11e, Katzung, Masters, and Trevor (Chapter 3: Pharmacokinetics & Pharmacodynamics: Rational Dosing & the Time Course of Drug Action)
- *Pharmacotherapy: A Pathophysiologic Approach , DiPiro et al., (Chapter 5: Clinical Pharmacokinetics and Pharmacodynamics)

*Free online text found at McGraw Hill Access Pharmacy under textbooks accessed through Roseman University ARC site: https://nv-ezproxy.roseman.edu:2443/login

Recording Policy

Drs. Chakraborty, Metzger, and Rawlins will allow audio recording during regular class time for personal study use only. Distribution of audio recordings is not allowed. Video recording is prohibited.

Appendix 6. (continued)

Recording of any kind during assessments, remediations, assessment reviews or reassessment reviews is strictly forbidden. This recording policy also applies to summer remediation for block PHAR 412. The use of any electronic device during assessment reviews is not allowed. Violators of the recording policy will be dealt with according to the policies and procedures outlined in the student handbook.

PHAR 410 Block Content and Schedule

Classes start at 8 am and end at 3pm. Students will be allowed a 1 hour break for lunch. The time for the lunch break will be at the discretion of the facilitator for that day. Scheduling and duration of team activities will also be at the discretion of the facilitator. Students are expected to attend class and participate in all learning activities.

Facilitators encourage questions and discussions during class time. The block system does not constrain class time to 50 minute periods; consequently, block faculty expect, and it is to your advantage to seek additional clarification, amplification of concepts, or further explanation during class time. The block faculty members encourage you to ask questions, seek clarification, and request amplification during class time.

Appendix 6. (continued)

Block Day	Date	Topics Covered	Facilitator
1	17 Sept	Chemistry Review	Metzger
2	18 Sept	Acids/bases & Acid/base disorders	Metzger
3	19 Sept	Amino Acids & Peptides	Chakraborty
4	20 Sept	Proteins: Structure and Function	Chakraborty
5	23 Sept	Enzymes: Classification, Kinetics and Control	Chakraborty
6	24 Sept	Biotransformation Molecular Targets and Signal Transduction	Metzger
7	25 Sept	Molecular Targets and Signal Transduction (cont'd)	Metzger
8	26 Sept	Pharmacokinetic and Pharmacodynamic Properties of Drugs	Metzger
	27 Sept	**Assessment 1.2** *Covers material from PHAR 410 block days 1-8*	Metzger Chakraborty
	30 Sept	**ReAssessment 1.2**	Metzger Chakraborty
9	1 Oct	Biological Membranes: Structure and Transport Cellular Communication	Rawlins Rawlins
	2 Oct	PHAR 411: DAY 1	Rawlins
	3 Oct	PHAR 411: DAY 2	Rawlins
	4 Oct	PHAR 411: DAY 3	Rawlins
	7 Oct	PHAR 411: DAY 4	Rawlins
	8 Oct	PHAR 411: DAY 5	Rawlins
	9 Oct	Immunization Provider Certification	Madison
	10 Oct	Immunization Provider Certification	Madison
	11 Oct	**Assessment 1.3** *Covers material from PHAR 410 block day 9, and Days 1-5 from PHAR 411*	Rawlins
	14 Oct	**ReAssessment 1.3**	Rawlins

Appendix 7. Institutional Student Learning Outcomes (ISLOs) Link to Programmatic Outcomes and Assessment

Roseman University Institutional Student Learning Outcomes with Mapping to Programmatic Student Learning Outcomes

- Students will demonstrate the requisite knowledge and skills of an entry-level professional.
- Students will be able to evaluate, analyze, and apply information to make evidence-based decisions and solve problems.
- Students will demonstrate effective communication skills.
- Students will demonstrate attitudes and behaviors consistent with the norms of his/her profession

Students will demonstrate the requisite knowledge and skills of an entry-level professional.					
Program	**Programmatic SLOs that support Institutional SLO**	**Assessment Methodology**	**Assessment Frequency**	**Formative outcome indicator(s)**	**Summative outcome indicator(s)/benchmark**
Nursing	Student demonstrates a holistic, individualized approach to nursing care that considers lifestyle, cultural, psychosocial and personal preferences to empower patients and families to make informed decisions.	• Evaluation of Lab Simulations & Skills • Clinical Performance Evaluation Tool • Clinical Care Plans, Concept Map, or Project • Individual and Group Assessments • Appropriately reporting concerns to faculty and nurse-mentors	• Varies based on # of labs in Block 2, 3, 5, 8, 9, 10 • Mid-course & End-course Block 3.1, 5.1, 8.1, 9.1, 10.1, 11.1, 14.0 • Once in Block 3.1, 5.1, 8.1, 9.1, 10.1, 11.1, 14.0 • All Blocks every 2-4 weeks • Ongoing based on incidence	• Rubric score & faculty observation/feedback • Rubric score Needs Improvement/Making Satisfactory Progress & P/NP; Faculty Comments; Clinical Intervention Plan • Rubric score Needs Improvement/Making Satisfactory Progress & P/NP; Faculty Comments; Clinical Intervention Plan • 90% on all assignments, activities; & assessments; Academic Intervention Plan • Varies based on concerns expressed	• Student on-time program completion rate is ≥ 90% • Student academic attrition rate is ≤ 5% • NCLEX passing rate is at or above national averages • Job Placement rate 9-month-post graduation ≥ 90%
	Student demonstrates a commitment to life-long learning and application of evidence-based research to practice.	• Individual and Group Assessments • Research, Culture, Leadership, Nsg Theory, Community	• All Blocks every 2-4 weeks • Once each in Block 1.0, 6.0, 7.0, 11.0, 13.0	• 90% on all assignments, activities; & assessments; Academic Intervention Plan • Rubric score	

Appendix 7. (continued)

		Health Paper/Project			
	The student provides quality and safe patient-centered care based on current practices that incorporates quality improvement measures into daily nursing practice.	• Evaluation of Lab Simulations & Skills • Clinical Performance Evaluation Tool • Appropriately reporting concerns to faculty and nurse-mentors • Clinical Care Plans, Concept Map, or Project • Individual and Group Assessments • ATI Learning Systems	• Varies based on # of labs in Block 2, 3, 5, 8, 9, 10 • Mid-course & End-course Block 3.1, 5.1, 8.1, 9.1, 10.1, 11.1, 14.0 • Ongoing based on incidence • Once in Block 3.1, 5.1, 8.1, 9.1, 10.1, 11.1, 14.0 • All Blocks every 2-4 weeks • All clinical-focused didactic Blocks & at the end of all Clinical Blocks (except 3.1)	• Rubric score & faculty observation/feedback • Rubric score Needs Improvement/Making Satisfactory Progress & P/NP; Faculty Comments; Clinical Intervention Plan • Varies based on concerns expressed • Rubric score Needs Improvement/Making Satisfactory Progress & P/NP; Faculty Comments; Clinical Intervention Plan • 90% on all assignments, activities; & assessments; Academic Intervention Plan • Trending of level achieved	
MBA	Student demonstrates the knowledge and skills of competent business professionals.	• Evaluation of the various components of the business plan project, written and oral presentation	• Submissions occur in MBA 642, 650, 662, 620, 630, 670 and 690	• Rubric score & faculty observation and feedback	• Student on-time program completion rate is ≥ 90% • Student academic attrition rate is ≤ 5% • MFT passing rate is at or above national averages

Appendix 7. (continued)

					• At least eighty percent (80%) of graduating students in the first attempt will achieve a rating of "Meets Expectations" on the final business plan submission in the capstone (MBA 690)
Pharmacy	The student will apply basic and clinical science knowledge to review the patient medication profile and to identify, prevent, and resolve medication-related errors and problems. The student is able to recommend prescription and over the counter medications based on knowledge of disease state management, interpretation of clinical laboratory values, adverse drug reactions, and drug interactions. The student is able to procure, store,	• Didactic - Formative (active learning, worksheets, papers); Summative (assessments, Rubrics, OSCEs) • Experiential Rubrics	• Didactic - Varied throughout all 3 years of the program • Experiential • Midpoint & end of each rotation	• Didactic mapping with gap analysis • Experiential • Rubric – midpoint evaluation verbal feedback/no grade	• Student on-time program completion rate is ≥ 76% • Student academic attrition rate is ≤ 6% • NAPLEX passing rate is at or above national averages

Appendix 7. (continued)

	prepare, and dispense medications accurately and time-efficiently using appropriate pharmacy management systems.				
Dentistry	Graduates must be able to apply biomedical science knowledge and principles for the management of patients.	• Multiple Choice Examination • Student Self-Assessment • Objective Structured Clinical Examinations (OSCE) • Triple Jump • Independent performance exercise (IPE) & assessments (IPA) • Case presentations • Clinical End of Block Summative Evaluations • Electronic Health Record (EHR) procedural evaluations	• Formative Assessments: Daily • Summative Assessments: End of academic blocks (from 2 weeks to 3 months depending on block)	• Appropriate biomedical principles being appropriately applied to 90% of case presentation • Biomedical principles being addressed in daily treatment plan 90%	• Student on-time program completion rate is ≥ 90% • Student academic attrition rate is ≤ 5% • NBDE passing rate is at or above national averages
	Graduates must be able to assess the health care status of patients across the age spectrum from child to elderly, including individuals	• Multiple Choice Examination • Student Self-Assessment • Objective Structured Clinical	• Formative Assessments: Daily • Summative Assessments: End of academic blocks (from 2 weeks to 3	• Health care status is assessed via properly phased and sequenced treatment plans being approved at 90%	

Appendix 7. (continued)

	with special needs, and develop a diagnosis for identified abnormalities and problems.	Examinations (OSCE) • Triple Jump • Independent performance exercise (IPE) & assessments (IPA) • Case presentations • Clinical End of Block Summative Evaluations • Electronic Health Record (EHR) procedural evaluations	months depending on block)	• 90% of patients with appropriately signed consents • Health care status is being assessed appropriately in 90% of case presentations	
	Graduates must be able to develop treatment plans to address oral health care problems of patients across the age spectrum from infant to elderly including individuals with special needs, and assess the outcomes of treatment.	• Multiple Choice Examination • Student Self-Assessment • Objective Structured Clinical Examinations (OSCE) • Triple Jump • Independent performance exercise (IPE) & assessments (IPA) • Case presentations • Clinical End of Block Summative Evaluations • Electronic Health Record (EHR) procedural evaluations	• Formative Assessments: Daily • Summative Assessments: End of academic blocks (from 2 weeks to 3 months depending on block)	• Health care status is assessed via properly phased and sequenced treatment plans being approved at 90% • 90% of patients with appropriately signed consents • Health care status is being assessed appropriately in 90% of case presentations	
	Graduates must be able to apply psychosocial and behavioral principles for promoting, improving, and maintaining patients' oral health.	• Multiple Choice Examination • Student Self-Assessment • Objective Structured Clinical Examinations (OSCE) • Triple Jump • Independent performance exercise (IPE) & assessments (IPA) • Case presentations • Clinical End of Block Summative Evaluations • Electronic Health Record (EHR) procedural evaluations	• Formative Assessments: Daily • Summative Assessments: End of academic blocks (from 2 weeks to 3 months depending on block)	• Psychosocial and behavioral principles are assessed via properly adapted treatment plans being approved at 90% • Appropriate adaptation to patient needs exhibited by patient satisfaction surveys. • Health care status is being assessed appropriately in 90% of case presentations	

Appendix 7. (continued)

Students will be able to evaluate, analyze, and apply information to make evidence-based decisions and solve problems.					
Program	**Programmatic SLOs that support Institutional SLO**	**Assessment Methodology**	**Assessment Frequency**	**Formative outcome indicator(s)**	**Summative outcome indicator(s)**
Nursing	The student utilizes health information systems and patient care technologies to facilitate evidence-based clinical decision-making; organize knowledge and data; enhance patient safety and quality of care to ensure regulatory compliance related to informatics and technology.	• Evaluation of Lab Simulations & Skills • Clinical Performance Evaluation Tool • Clinical Care Plans, Concept Map, or Project • Individual and Group Assessments • ATI Learning Systems	• Varies based on # of labs in Block 2, 3, 5, 8, 9, 10 • Mid-course & End-course Block 3.1, 5.1, 8.1, 9.1, 10.1, 11.1, 14.0 • Once in Block 3.1, 5.1, 8.1, 9.1, 10.1, 11.1, 14.0 • All Blocks every 2-4 weeks • All clinical-focused didactic Blocks & at the end of all Clinical Blocks (except 3.1)	• Rubric score & faculty observation/feedback • Rubric score Needs Improvement/Making Satisfactory Progress & P/NP; Faculty Comments; Clinical Intervention Plan • Varies based on concerns expressed • Rubric score Needs Improvement/Making Satisfactory Progress & P/NP; Faculty Comments; Clinical Intervention Plan • 90% on all assignments, activities; & assessments; Academic Intervention Plan • Trending of level achieved	• Student on-time program completion rate is ≥ 90% • Student academic attrition rate is ≤ 5% • NCLEX passing rate is at or above national averages • Job Placement rate 9-month-post graduation ≥ 90%
MBA					
Pharmacy	The student will able to retrieve, evaluate, and disseminate evidence-based drug information through the use of technology and informatics serving as a medication therapy	• Didactic Formative (active learning, worksheets, papers); Summative (assessments,	• Didactic Varied throughout all 3 years of the program • Experiential Midpoint & end of each rotation	• Didactic Portfolio Artifacts & mapping with gap analysis • Experiential Rubric – midpoint evaluation verbal feedback/no grade	• Didactic • Assessments – 90% cohort pass rate • 465 & 565 - 90% cohort pass rate

Appendix 7. (continued)

	resource and maintain a commitment to life-long learning.	Rubrics, OSCEs) • Experiential Rubrics			• Experiential Courses – 90% cohort pass rate
Dentistry	Graduates must be use critical appraisal during patient care. .	• Student Self-Assessment • Objective Structured Clinical Examinations (OSCE) • Triple Jump • Independent performance exercise (IPE) & assessments (IPA) • Case presentations • Clinical End of Block Summative Evaluations • Electronic Health Record (EHR) procedural evaluations	• Formative Assessments: Daily • Summative Assessments: End of academic blocks (from 2 weeks to 3 months depending on block)	• Health care status is assessed via properly phased and sequenced treatment plans being approved at 90% • Health care status is being assessed appropriately in 90% of case presentations	• Student on-time program completion rate is ≥ 90% • Student academic attrition rate is ≤ 5% • NBDE passing rate is at or above national averages

Students will demonstrate effective communication skills.					
Program	**Programmatic SLOs that support Institutional SLO**	**Assessment Methodology**	**Assessment Frequency**	**Formative outcome indicator(s)**	**Summative outcome indicator(s)**
Nursing	Student demonstrates effective and therapeutic interactions with patient/families/communities and all members of the healthcare team that incorporate communication practices to minimize risk to the patient during handoff and transfer situations.	• Evaluation of Lab Simulations & Skills • Clinical Performance Evaluation Tool • Clinical Care Plans, Concept Map, or Project • Individual and Group Assessments • ATI Learning Systems	• Varies based on # of labs in Block 2, 3, 5, 8, 9, 10 • Mid-course & End-course Block 3.1, 5.1, 8.1, 9.1, 10.1, 11.1, 14.0 • Once in Block 3.1, 5.1, 8.1, 9.1, 10.1, 11.1, 14.0 • All Blocks every 2-4 weeks • All clinical-focused didactic Blocks & at the end of all Clinical Blocks (except 3.1)	• Rubric score & faculty observation/feedback • Rubric score Needs Improvement/Making Satisfactory Progress & P/NP; Faculty Comments; Clinical Intervention Plan • Varies based on concerns expressed • Rubric score Needs Improvement/Making Satisfactory Progress & P/NP; Faculty Comments; Clinical Intervention Plan • 90% on all assignments, activities; & assessments; Academic Intervention Plan • Trending of level achieved	• Student on-time program completion rate is ≥ 90% • Student academic attrition rate is ≤ 5% • NCLEX passing rate is at or above national averages • Job Placement rate 9-month-post graduation ≥ 90%
MBA	Student demonstrates effective communication skills.	• Leadership paper series	• Leadership reflection papers are submitted in MBA 602, 603, 605 and 645	• Rubric score & faculty feedback	• Students must score ≥ 90% on summative leadership paper in MBA 645

Appendix 7. (continued)

Pharmacy	The student demonstrates effective communication skills in counseling patients, and in interacting with other healthcare professionals, ensuring appropriate medication therapy outcomes.	• Didactic Formative (rubrics/verbal feedback or verbal feedback alone); Summative (Rubrics/verbal and written feedback) • Experiential Rubrics	• Varied throughout 3 years although • Experiential Midpoint and end of rotation	• Didactic Portfolio Artifacts & mapping with gap analysis • Experiential Rubric - midpoint evaluation verbal feedback/no grade	• PHAR465, 495, 565, IPE & 595 – 90% cohort pass rate • Experiential Courses – 90% cohort pass rate
Dentistry	Graduates must be able to function as a leader of a primary care health team and collaborate with other health care providers.	• Student Self-Assessment • Objective Structured Clinical Examinations (OSCE) • Independent performance exercise (IPE) & assessments (IPA) • Case presentations • Electronic Health Record (EHR) procedural evaluations • Clinical End of Block Summative Evaluations	• Formative Assessments: Daily • Summative Assessments: End of academic blocks (from 2 weeks to 3 months depending on block)	• Appropriate consultation and coordination of healthcare is applied in 90% of case presentations • Appropriate consultation and coordination of healthcare is applied in 90% of daily patient care	• Student on-time program completion rate is ≥ 90% • Student academic attrition rate is ≤ 5% • NBDE passing rate is at or above national averages
	Graduates must be able to provide counseling and education to promote patients' oral health.	• Student Self-Assessment • Objective Structured Clinical Examinations (OSCE) • Independent performance exercise (IPE) & assessments (IPA) • Case presentations • Electronic Health Record (EHR) procedural evaluations • Clinical End of Block Summative	• Formative Assessments: Daily • Summative Assessments: End of academic blocks (from 2 weeks to 3 months depending on block)	• Appropriate consultation and coordination of healthcare is applied in 90% of patient treatment plan presentations • Appropriate patient education applied in 90% of daily patient care • Outline appropriate patient education in 90% of case presentations	• Student on-time program completion rate is ≥ 90% • Student academic attrition rate is ≤ 5% • NBDE passing rate is at or above national averages

Appendix 7. (continued)

Students will demonstrate attitudes and behaviors consistent with the norms of his/her profession.					
Program	**Programmatic SLOs that support Institutional SLO**	**Assessment Methodology**	**Assessment Frequency**	**Formative outcome indicator(s)**	**Summative outcome indicator(s)**
Nursing	Student demonstrates the professional standards of moral ethical and legal behavior when working with diverse populations in complex and changing environments based on applied knowledge and skills of organizational and systems leadership to improve patient-care outcomes in diverse populations and health-care environments	• Evaluation of Lab Simulations & Skills • Clinical Performance Evaluation Tool • Clinical Care Plans, Concept Map, or Project • Individual and Group Assessments • ATI Learning Systems	• Varies based on # of labs in Block 2, 3, 5, 8, 9, 10 • Mid-course & End-course Block 3.1, 5.1, 8.1, 9.1, 10.1, 11.1, 14.0 • Once in Block 3.1, 5.1, 8.1, 9.1, 10.1, 11.1, 14.0 • All Blocks every 2-4 weeks • All clinical-focused didactic Blocks & at the end of all Clinical Blocks (except 3.1)	• Rubric score & faculty observation/feedback • Rubric score Needs Improvement/Making Satisfactory Progress & P/NP; Faculty Comments; Clinical Intervention Plan • Varies based on concerns expressed • Rubric score Needs Improvement/Making Satisfactory Progress & P/NP; Faculty Comments; Clinical Intervention Plan • 90% on all assignments, activities; & assessments; Academic Intervention Plan • Trending of level achieved	• Student on-time program completion rate is ≥ 90% • Student academic attrition rate is ≤ 5% • NCLEX passing rate is at or above national averages • Job Placement rate 9-month-post graduation ≥ 90%
MBA	Student demonstrates the attitudes and behaviors of responsible leaders.	• Evaluation of the various components of the business plan project, written and oral presentation	• Submissions occur in MBA 642, 650, 662, 620, 630, 670 and 690 • Leadership reflection	• Rubric score & faculty observation and feedback • Rubric score & faculty feedback	• At least eighty percent (80%) of graduating students in the first attempt will achieve a rating of "Meets

Appendix 7. (continued)

		• Leadership paper series	papers are submitted in MBA 602, 603, 605 and 645		Expectations" on the final business plan submission in the capstone (MBA 690) • Students must score ≥ 90% on summative leadership paper in MBA 645
Pharmacy	The student demonstrates core professional values such as ethics, integrity, responsibility, and compassion.	• Didactic Formative (verbal feedback); Summative (Rubrics) • Experiential Rubrics	• Varied throughout 3 years • Experiential Midpoint and end of rotation	• Didactic • Portfolio Artifacts & mapping with gap analysis • Experiential Rubric - midpoint evaluation verbal feedback/no grade	• PHAR495 & PHAR595 – 90% cohort pass rate • NMT 5% professionalism probations per class • Experiential Courses – 90% cohort pass rate
Dentistry	Graduates must use principles of ethical reasoning and professional behavior during their interactions with patients, other health care providers, and the public.	• Multiple Choice Examination • Student Self-Assessment • Objective Structured Clinical Examinations (OSCE) • Triple Jump • Independent performance exercise (IPE) & assessments (IPA) • Case presentations	• Formative Assessments: Daily • Summative Assessments: End of academic blocks (from 2 weeks to 3 months depending on block)	• Principles of ethical reasoning and professional behavior appropriately applied in 90% of case presentations • Appropriate Principles of ethical reasoning and professional behavior applied in 90% of daily patient care • Appropriate principles of ethical reasoning and professional behavior	• Student on-time program completion rate is ≥ 90% • Student academic attrition rate is ≤ 5% • NBDE passing rate is at or above national averages
		• Clinical End of Block Summative Evaluations • Electronic Health Record (EHR) procedural evaluations		exhibited by patient satisfaction surveys	

Appendix 8. DMD Program Assessment of ISLOs with Rubrics and Assessment

The University has defined several Student Learning Outcomes that are reflected in specific CODM student Learning outcomes. The specific CODM learning outcomes that we assess also reflect the competencies expected of our graduates by The Commission on Dental Accreditation (CODA). The outcomes, both university and program specific, are listed below along with their method of assessment. Outcomes are reported for initial assessments. Subsequent reassessments allowed all students to pass blocks that require 90% threshold.

Attached are the student learning outcome rubrics, an example of our clinical case presentation rubric, the faculty student assessment form, the student self-assessment form and CPT end of block student evaluation/assessment form.

A. The first University Student Learning Outcome is: "Students will demonstrate the requisite knowledge and skills of an entry-level professional." This University outcome is defined by the CODM via 4 program specific student learning objectives.

1. Graduates must be able to apply Biomedical Science knowledge and principles for the management of patients.

a. Formative Assessment indicators include:

1.) Appropriate biomedical principles are being applied to 90% of corresponding clinical courses. (Case Presentation Rubric- attached).

a.) Outcome Measure: 2017 -2020 initial presentation pass rates for Clinical Practice Team Meeting courses 6421, 6422, 6423 7421, 7422, 7423, 8421, 8422, ave. 98%.

2.) Biomedical principles being appropriately addressed in 90% of daily treatment plans. (Treatment Planning Guidelines- attached.)

a.) Outcome Measure: 2017 – 2020 initial presentation pass rates for the Primary Clinic Courses 6401, 6402, 6403, 7401,7402, 7403, 8401, 8402 ave. 97%.

3.) Biomedical course initial pass rate of 90% of students in biomedical science blocks. Indicated in successful completion of biomedical courses.

a.) Outcome Measure: 2017 – 2020 pass rates for 5240, 5241, 5242, 5244 ave. 97%

The following two student learning outcomes are measured by the same three formative assessments.

2. Graduates must be able to assess the health care status of patients across the age spectrum from child to elderly, including individuals with special needs and develop a diagnosis for identified abnormalities and problems.

3. Graduates must be able to develop treatment plans to address oral health care problems of patients across the age spectrum from infant to elderly including individuals with special needs and assess the outcomes of treatment.

Appendix 8. (continued)

Roseman's patient pool is sufficient to provide DMD students with experience treating all age groups as shown in the chart below.

Roseman University of College Dental Medicine Patient Age Demographics (2017 -2020)

Age	1-11	12-17	18-40	41-55	56-64	65-Up
Quantity	1346	1218	7781	4214	1794	2168
% of Patients	7.3	6.6	42.0	22.7	9.7	11.7

a. Formative Assessment Indicators include:

1.) Initial presentation reflects properly phased and sequenced treatment plans adapted to patient needs at 90%.

a. Outcome Measure: 2017 – 2020 Ave. 85% (source auiXm patient data program) (100% passed block after subsequent assessments)

2.) Initial presentation reflects 90% of patients with appropriately signed consents accepting personalized treatment plans.

a. Outcome Measure: 2017 – 2020 Ave. 78% (100% passed block after subsequent assessments)

3.) Initial presentation reflects health care status is being assessed and treated appropriately in 90% of case presentations. (Attachment 1-Case Presentation Rubric).

a. Outcome Measure: 2027 – 2020 initial pass rates for Clinical Practice Team Meeting 6420, 7420, 8420 Ave. 99%.

4. Graduates must be able to apply psychosocial and behavioral principles for promoting, improving and maintaining patients' oral health.

a. Formative Assessment Indicators include:

1.) Initial presentation reflects that appropriate psychosocial and behavioral principles being applied to 90% of case presentations.

a. Outcome Measure: 2017 -2020 initial pass rates for Clinical Practice Meeting 6421, 6422, 6423 7421, 7422, 7423, 8421, 8422 Ave. 98%

2.) Initial presentation reflects that psychosocial and behavioral principles being appropriately addressed in 90% of daily treatment plans.

a. Outcome Measure: 2017 -2020 pass rates for Primary Care Clinic 6401, 6402, 6403, 7401,7402, 7403, 8401, 8402 Ave. 97%.

B. The second University Student Learning Outcome is that students will be able to evaluate, analyze and apply information to make evidence-based decisions and solve problems. This University outcome is defined by the CODM via one program specific student learning objective.

1. Graduates must use evidenced based, critical thinking skills during patient care.

a. Formative Assessments Indicators include:

Appendix 8. (continued)

1.) Initial presentation reflects properly phased and sequenced treatment plans adapted to patient needs at 90%

a.) Outcome Measure: 2017 -2020 percentage of approved treatment plan (Clinical Outcome #7) Ave. 85% (100% passed block after subsequent assessments)

2.) Initial presentation reflects health care status and critical thinking skills appropriately applied in 90% of case presentations.

a.) Outcome Measure: 2017-2020 initial pass rates for Clinical Practice Team Meeting 6421, 6422, 6423 7421, 7422, 7423, 8421, 8422 Ave. 98%

C. The third University Student Learning Outcome is that students will demonstrate effective communication skills. This University outcome is defined by the CODM via 2 program specific student learning objectives.

1. Graduates must be able to function as a leader of a primary care health team and collaborate with other health care providers.

2. Graduates must be able to provide counseling and education to promote patients' oral health.

a. Formative assessments include:

1) Student when acting as team leader (under faculty supervision) ensures that appropriate consultation and coordination of health care is applied in 90% of case presentations.

a. Outcome Measure: 2017 – 2020 initial pass rates for Clinical Practice Team Meeting 6421, 6422, 6423 7421, 7422, 7423, 8421, 8422 Ave. 98%.

3) Student when acting as team leader (under faculty supervision) ensures that appropriate consultation and coordination of healthcare is correctly applied in 90% of daily patient care. This is assessed in the End of Block Assessment (attached).

a. Outcome Measure: 2017 -2020 initial pass rates for Primary Care Clinic 6401, 6402, 6403, 7401,7402, 7403, Ave. 97%.

D. The fourth University Learning Outcome is that students will demonstrate attitudes and behaviors consistent with the norms of his/her profession. This University outcome is defined by the CODM via one program specific student learning objective.

1. Graduates must use principles of ethical reasoning and professional behavior as defined by the Commission on Dental Accreditation (CODA), during their interactions with patients, other health care providers and the public.

a. Formative Assessment Indicators include:

1) Principles of ethical reasoning and professional behavior appropriately applied in 90% of case presentations.

a. Outcome Measure: 2017-2020 pass rates for Clinical Practice Team Meeting 6420, 7420, 8420 Ave. 98%

2) Appropriate principles of ethical reasoning and professional behavior applied in

90% of daily patient care assessed in end of block assessment (attached).

a. Outcome Measure: 2017- 2020 pass rates for Primary Care Clinic 6401, 6402, 6403, 7401,7402, 7403, Ave. 97%

The following Summative Assessment Indicators apply to all CODM program specific Student Learning Outcomes that are listed above:

1) Student on time completion rate (2017 – 2019) is > 90%

a. Outcome Measure: Classes of 2017 - 2019 – 98%

b. Class of 2020 was impacted by the Pandemic (COVID-19). All students had completed their academic and clinical requirements for graduation but 7 were unable to complete NBDE Part 2 due to the closure of the testing centers. All were rescheduled in July – September of this year. 91% finished on time prior to the Pandemic.

2) Student Academic attrition rate (2017 – 2020) is < 5%

a. Outcome Measure: (2017 – 2020) < 1% or less per year

3) NBDE (Parts 1 and 2) passing rate at or above national average (2017 – 2020) is >90%

a. Outcome Measure: (2017 -2020) Ave. 91.5%

Appendix 8. (continued)

Outline for Case Presentation

INSTRUCTIONS
Use this outline as your step-by-step guide to organize materials for your case presentation.

SECTION 1 INTRODUCTION & HISTORY

INTRODUCTION

- biographical data
- occupation
- socioeconomic profile

HISTORY

- chief complaint
- history of present illness
- behavioral profile

medical history
- significant medical history
- summary of medical status

meds & medical risk
- current medications
- ASA
- medical consult needed?

med consult (if applicable)
- medical consult
- reply from MD
- recommendations

dental history
- last dental exam
- history of dental care
- pain or bleeding present?
- problems with dental care?
- anxiety or fear?

teeth
- list radiographic caries, etc.

SECTION 2 CLINICAL & RADIOGRAPHIC FINDINGS

EXTRAORAL FINDINGS

- list vital signs
- describe only significant findings

INTRAORAL FINDINGS

- list soft tissue lesions
- include oral conditions (dry mouth)
- head and neck cancer screening

OH status
- summarize
- plaque, calculus, stain, food impaction, etc.

periodontal description
- describe gingiva
- describe significant periodontal findings

periodontal charting
- overview of significant charting

dentition description
- number of teeth present
- state of repair
- mobility
- restorations overview (#, type, defects)

caries description
- describe clinical caries present
- list teeth with clinical caries evident
- list caries risk factors / risk assessment findings

occlusal analysis
- overview of existing occlusion
- classify occlusion

RADIOGRAPHIC FINDINGS

- list films

bone
- describe bone loss, severity, distribution
- list defects, furcations, periapical lesions

Roseman CODM 2/4/15

Appendix 8. (continued)

SECTION 3 PROBLEMS & DIAGNOSIS

MANAGEMENT CONCERNS

- list medical / systemic problems
- apply basic science & dental knowledge to management issues
- explain pathogenesis of diseases present
- describe medication issues
- list anxiety/behavioral/economic issues
- identify complexity of case and appropriate referrals if necessary

PERIODONTAL PROBLEMS

- periodontal status
- etiologic factors
- systemic factors
- homecare / OH issues

DENTITION PROBLEMS (list in order of importance)

- missing teeth
- non-restorable teeth
- amount & location of caries
- periapical lesions
- defective restorations
- occlusal issues
- OH considerations

DIAGNOSES

- periodontal
- dentition
- oral diseases, other

SECTION 4 TREATMENT PLAN OPTIONS

REFERENCE SOURCES

- list 3 reference sources (not textbooks)
- describe relevance to case

TREATMENT OPTIONS

- develop & defend treatment objectives
- create 2 viable treatment plan options

positives & negatives
- compare & contrast

patient considerations
- describe how choices presented to patient
- interpret patient modifiers & goals

rationale
- defend choice
- list reasons why

FINAL TREATMENT PLAN

- create final treatment plan using evidence - based rationale

- list phases 1-4

goals & timeline
- describe timeline

assessment
- create plan to assess effectiveness of tx.

completed treatment (if applicable)
- list / show

SECTION 5 PROGNOSIS & SUMMARY

PROGNOSIS

- predict outcome / prognosis for treatment
- discuss patient responsibility & compliance
- discuss longevity of treatment

SUMMARY

- reflection / what learned?
- critique work / prepare self-assessment
- create plan for how to improve
- provide 3 thought-provoking questions

Appendix 8. (continued)

ROSEMAN UNIVERSITY
OF HEALTH SCIENCES

Student Self-Assessment Form

Student Name: _____

In the clinic, what are your strengths? _____

In the clinic, what are your weaknesses? (Be specific – where do you need more clinical experience) _____

_____

Do you feel that you are getting the help, instruction, and guidance that you need? _____

What areas do you feel that you need help? _____

On a scale of 1-10:

_____ How well are you progressing clinically?
_____ How confident are you that your outcomes will be favorable?
_____ How independent do you feel (able to make clinical decisions and perform procedures without faculty support, guidance, or intervention)?

Student Self-Assessment Rating

___ Overall: Level of performance in working independently

A. Diagnosis and Judgment
- ___ Familiar with health history, used appropriately in treatment
- ___ Familiar with total dental condition, considered appropriately in treatment
- ___ Works within limits of skills (but not afraid to enhance skill levels)
- ___ Works independently, as appropriate – not overly dependent on faculty

B. Technical skill in the discipline of (radiology, perio, dx/tx planning, OMFS, operative, pedo, endo, fixed/removable prosth, special needs pt.): _____
- ___ Understands theory, basic concepts
- ___ Skill in accomplishing individual procedures
- ___ Integrates and adapts procedures to overall treatment

C. Patient Management
- ___ Respects patient's individuality, dignity – puts patient's interests first
- ___ Professional manner, good rapport, builds confidence
- ___ Organized, orderly, good use of time, infection control

D. Professionalism and Record Management
- ___ Attendance: # of leave days used during current academic year
- ___ Person-centered Care: consistently available to provide patient care
- ___ Teamwork: works to develop and mentor partner and others in Quad
- ___ Record management

□ In process procedures	□ Radiographs approved/saved	□ Pts with balances
□ Unscheduled recall pts	□ Missing treatment codes	□ Consents on file
□ Updated medical history	□ Unapproved/missing notes	□ Cancelled/failed appointments

9-10: Competent at this level; move to next level
6-8: Progressing satisfactorily
3-5: Marginal, evaluate for needed remedial help
1-2: Significant deficiencies; intervention is needed now

*Comment on back for any rating 5 or lower. A single incident may be all that is necessary to initiate special help for students in need.

_____ _____
(Student Signature) (Date)

_____ _____
(CPT Leader Signature) (Date)

Roseman CODM 10/16/17

Appendix 8. (continued)

ROSEMAN UNIVERSITY
OF HEALTH SCIENCES

Student Assessment Form

Student Name: _____

Roseman University CODM defines critical thinking as "the process of assimilating and analyzing information; this encompasses an interest in finding new solutions, a curiosity with an ability to admit to a lack of understanding, a willingness to examine beliefs and assumptions and to search for evidence to support these beliefs and assumptions, and the ability to distinguish between fact and opinion." The CODM believes that "the cornerstone of professional practice is the application of thought processes that allow dentists to recognize pertinent information in a patient's presentation, make accurate decisions based on deliberate and open-minded review of available options, evaluate outcomes of therapeutic decisions, and assess their own performance."[1]

___ Overall: Level of performance expected next time student works independently

A. Diagnosis and Judgment
- ___ Familiar with health history, used appropriately in treatment
- ___ Familiar with total dental condition, considered appropriately in treatment
- ___ Works within limits of skills (but not afraid to enhance skill levels)
- ___ Works independently, as appropriate – not overly dependent on faculty

B. Technical skill in the discipline of (radiology, perio, dx/tx planning, OMFS, operative, pedo, endo, fixed/removable prosth, special needs pt.):_____
- ___ Understands theory, basic concepts
- ___ Skill in accomplishing individual procedures
- ___ Integrates and adapts procedures to overall treatment

C. Patient Management
- ___ Respects patient's individuality, dignity – puts patient's interests first
- ___ Professional manner, good rapport, builds confidence
- ___ Organized, orderly, good use of time, infection control

D. Professionalism and Record Management (*For CPT Leader/Coordinator/Student Use only*)
- ___ Attendance: # of leave days used during current academic year
- ___ Person-centered Care: consistently available to provide patient care
- ___ Teamwork: works to develop and mentor partner and others in Quad
- ___ Record management
  - □ In process procedures
  - □ Unscheduled recall pts
  - □ Updated medical history
  - □ Radiographs approved/saved
  - □ Missing treatment codes
  - □ Unapproved/missing notes
  - □ Pts with balances
  - □ Consents on file
  - □ Cancelled/failed appointments

9-10: Competent at this level; move to next level
6-8: Progressing satisfactorily
3-5: Marginal, evaluate for needed remedial help
1-2: Significant deficiencies; intervention is needed now

*Comment on back for any rating 5 or lower. A single incident may be all that is necessary to initiate special help for students in need.

_____ _____
(Student Signature) (Date)

_____ _____
(Clinical Faculty Signature) (Date)

Roseman CODM 10/16/17

Appendix 8. (continued)

ROSEMAN UNIVERSITY
OF HEALTH SCIENCES

CPT Student Evaluation

Student Name: _____

Goals and Objectives with Action Plan

Based upon your clinical experiences so far in your Clinical Practice Team (CPT) and your own assessment of your clinical experiences, please list below three to five personal/professional goals or objectives you wish to achieve over the next _____ months.

Goals or Training Objectives:

1. _____
2. _____
3. _____
4. _____
5. _____

Additional Goals or Training Objectives as Identified and Discussed with your CPT leader and/or Attending Faculty:

1. _____
2. _____
3. _____

The following section is to be completed with your CPT Leader and Attending Faculty at the start of the next evaluation period.

Action Plan to meet Stated Goals and Objectives:

1. _____
2. _____
3. _____
4. _____
5. _____

Signature: _____ **Date:** _____

Signature: _____ **Date:** _____

Roseman CODM 10/16/17

Appendix 8. (continued)

Students will demonstrate the requisite knowledge and skills of an entry-level professional.					
Program	**Programmatic SLOs that support Institutional SLO**	**Assessment Methodology**	**Assessment Frequency**	**Formative outcome indicator(s)**	**Summative outcome indicator(s)/benchmark**
Dentistry	Graduates must be able to apply biomedical science knowledge and principles for the management of patients.	• Multiple Choice Examination • Student Self-Assessment • Objective Structured Clinical Examinations (OSCE) • Triple Jump • Independent performance exercise (IPE) & assessments (IPA) • Case presentations • Clinical End of Block Summative Evaluations • Electronic Health Record (EHR) procedural evaluations	• Formative Assessments: Daily • Summative Assessments: End of academic blocks (from 2 weeks to 3 months depending on block)	• Appropriate biomedical principles being appropriately applied to 90% of case presentation • Biomedical principles being addressed in daily treatment plan 90%	Student on-time program completion rate is ≥ 90% Student academic attrition rate is ≤ 5% NBDE passing rate is at or above national averages
	Graduates must be able to assess the health care status of patients across the age spectrum from child to elderly, including individuals with special needs, and develop a diagnosis for identified abnormalities and problems.	• Multiple Choice Examination • Student Self-Assessment • Objective Structured Clinical Examinations (OSCE) • Triple Jump • Independent performance exercise (IPE) & assessments (IPA) • Case presentations • Clinical End of Block Summative Evaluations	• Formative Assessments: Daily • Summative Assessments: End of academic blocks (from 2 weeks to 3 months depending on block)	• Health care status is assessed via properly phased and sequenced treatment plans being approved at 90% • 90% of patients with appropriately signed consents • Health care status is being assessed	

Appendix 8. (continued)

Students will be able to evaluate, analyze, and apply information to make evidence-based decisions and solve problems.					
Program	**Programmatic SLOs that support Institutional SLO**	**Assessment Methodology**	**Assessment Frequency**	**Formative outcome indicator(s)**	**Summative outcome indicator(s)**
Dentistry	Graduates must be use critical appraisal during patient care.	• Student Self-Assessment • Objective Structured Clinical Examinations (OSCE) • Triple Jump • Independent performance exercise (IPE) & assessments (IPA) • Case presentations • Clinical End of Block Summative Evaluations • Electronic Health Record (EHR) procedural evaluations	• Formative Assessments: Daily • Summative Assessments: End of academic blocks (from 2 weeks to 3 months depending on block)	• Health care status is assessed via properly phased and sequenced treatment plans being approved at 90% • Health care status is being assessed appropriately in 90% of case presentations	Student on-time program completion rate is ≥ 90% Student academic attrition rate is ≤ 5% NBDE passing rate is at or above national averages

Students will demonstrate effective communication skills.					
Program	**Programmatic SLOs that support Institutional SLO**	**Assessment Methodology**	**Assessment Frequency**	**Formative outcome indicator(s)**	**Summative outcome indicator(s)**

Appendix 8. (continued)

Dentistry	Graduates must be able to function as a leader of a primary care health team and collaborate with other health care providers.	• Student Self-Assessment • Objective Structured Clinical Examinations (OSCE) • Independent performance exercise (IPE) & assessments (IPA) • Case presentations • Electronic Health Record (EHR) procedural evaluations • Clinical End of Block Summative Evaluations	• Formative Assessments: Daily • Summative Assessments: End of academic blocks (from 2 weeks to 3 months depending on block)	• Appropriate consultation and coordination of healthcare is applied in 90% of case presentations • Appropriate consultation and coordination of healthcare is applied in 90% of daily patient care	Student on-time program completion rate is ≥ 90% Student academic attrition rate is ≤ 5% NBDE passing rate is at or above national averages
	Graduates must be able to provide counseling and education to promote patients' oral health.	• Student Self-Assessment • Objective Structured Clinical Examinations (OSCE) • Independent performance exercise (IPE) & assessments (IPA) • Case presentations • Electronic Health Record (EHR) procedural evaluations • Clinical End of Block Summative	• Formative Assessments: Daily • Summative Assessments: End of academic blocks (from 2 weeks to 3 months depending on block)	• Appropriate consultation and coordination of healthcare is applied in 90% of patient treatment plan presentations • Appropriate patient education applied in 90% of daily patient care • Outline appropriate patient education in	Student on-time program completion rate is ≥ 90% Student academic attrition rate is ≤ 5% NBDE passing rate is at or above national averages

Appendix 8. (continued)

				90% of case presentations	

Students will demonstrate attitudes and behaviors consistent with the norms of his/her profession.					
Program	**Programmatic SLOs that support Institutional SLO**	**Assessment Methodology**	**Assessment Frequency**	**Formative outcome indicator(s)**	**Summative outcome indicator(s)**
Dentistry	Graduates must use principles of ethical reasoning and professional behavior during their interactions with patients, other health care providers, and the public.	• Multiple Choice Examination • Student Self-Assessment • Objective Structured Clinical Examinations (OSCE) • Triple Jump • Independent performance exercise (IPE) & assessments (IPA) • Case presentations • Clinical End of Block Summative Evaluations • Electronic Health Record (EHR) procedural evaluations	• Formative Assessments: Daily • Summative Assessments: End of academic blocks (from 2 weeks to 3 months depending on block)	• Principles of ethical reasoning and professional behavior appropriately applied in 90% of case presentations • Appropriate Principles of ethical reasoning and professional behavior applied in 90% of daily patient care. • Appropriate principles of ethical reasoning and professional behavior exhibited by patient satisfaction surveys.	Student on-time program completion rate is ≥ 90% Student academic attrition rate is ≤ 5% NBDE passing rate is at or above national averages

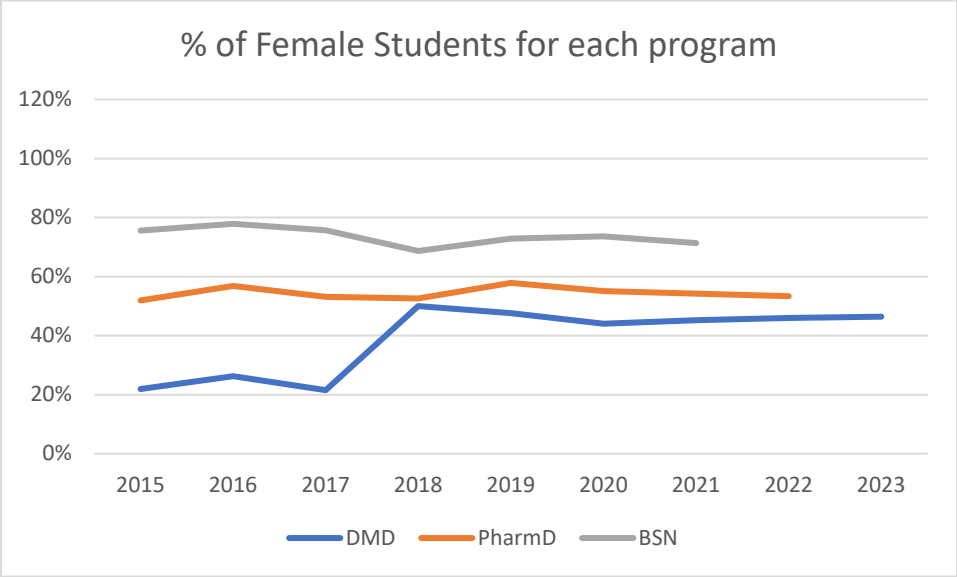
Appendix 8. (continued)

		• Electronic Health Record (EHR) procedural evaluations		appropriately in 90% of case presentations	
	Graduates must be able to develop treatment plans to address oral health care problems of patients across the age spectrum from infant to elderly including individuals with special needs, and assess the outcomes of treatment.	• Multiple Choice Examination • Student Self-Assessment • Objective Structured Clinical Examinations (OSCE) • Triple Jump • Independent performance exercise (IPE) & assessments (IPA) • Case presentations • Clinical End of Block Summative Evaluations • Electronic Health Record (EHR) procedural evaluations	• Formative Assessments: Daily • Summative Assessments: End of academic blocks (from 2 weeks to 3 months depending on block)	• Health care status is assessed via properly phased and sequenced treatment plans being approved at 90% • 90% of patients with appropriately signed consents • Health care status is being assessed appropriately in 90% of case presentations	
	Graduates must be able to apply psychosocial and behavioral principles for promoting, improving, and maintaining patients' oral health.	• Multiple Choice Examination • Student Self-Assessment • Objective Structured Clinical Examinations (OSCE) • Triple Jump • Independent performance exercise (IPE) & assessments (IPA) • Case presentations • Clinical End of Block Summative Evaluations • Electronic Health Record (EHR) procedural evaluations	• Formative Assessments: Daily • Summative Assessments: End of academic blocks (from 2 weeks to 3 months depending on block)	• Psychosocial and behavioral principles are assessed via properly adapted treatment plans being approved at 90% • Appropriate adaptation to patient needs exhibited by patient satisfaction surveys. • Health care status is being assessed appropriately in 90% of case presentations	

Appendix 9. Composition and Completion Rate data for DMD, PharmD, and BSN students by Gender, Ethnicity, and Age

Appendix 9a. Composition of DMD, PharmD and BSN Classes 2015-Present by Gender, Ethnicity and Age.

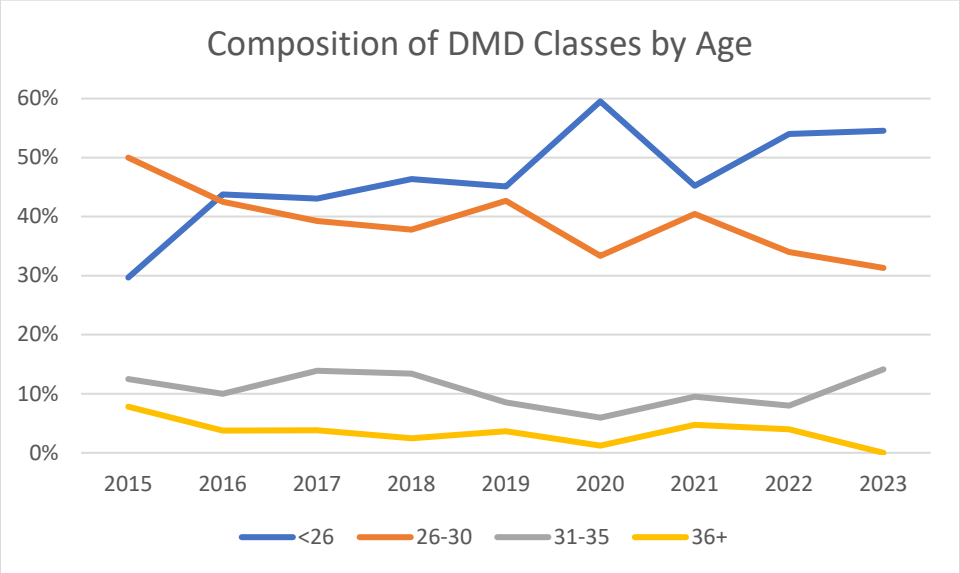
Composition – all programs by gender



	DMD	PharmD	BSN
2015	22%	52%	76%
2016	26%	57%	78%
2017	22%	53%	76%
2018	50%	53%	69%
2019	48%	58%	73%
2020	44%	55%	74%
2021	45%	54%	71%
2022	46%	53%	
2023	46%		

Appendix 9a. (continued)

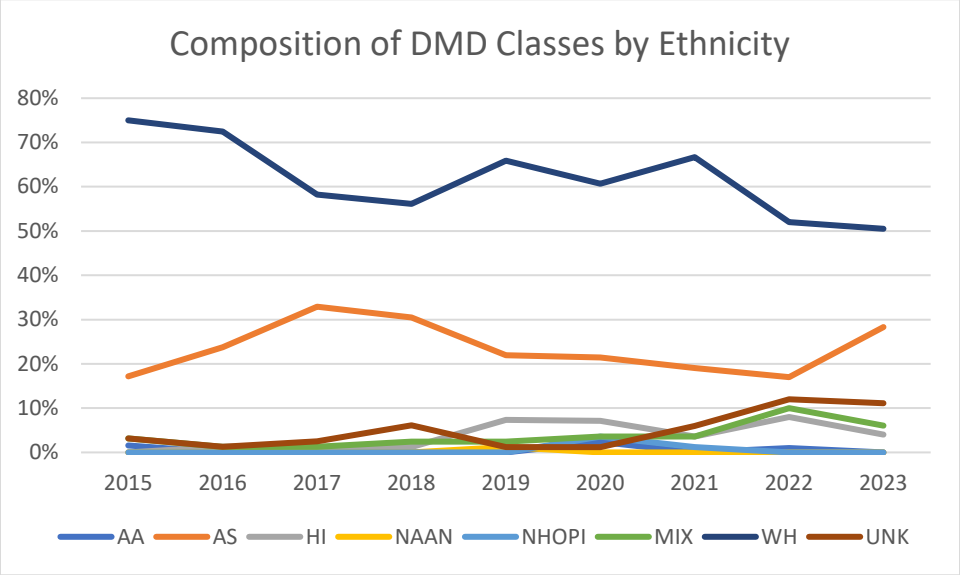
DMD Composition – by age



	<26	26-30	31-35	36+
2015	30%	50%	13%	8%
2016	44%	43%	10%	4%
2017	43%	39%	14%	4%
2018	46%	38%	13%	2%
2019	45%	43%	9%	4%
2020	60%	33%	6%	1%
2021	45%	40%	10%	5%
2022	54%	34%	8%	4%
2023	55%	31%	14%	0%

Appendix 9a. (continued)

DMD Composition – by ethnicity

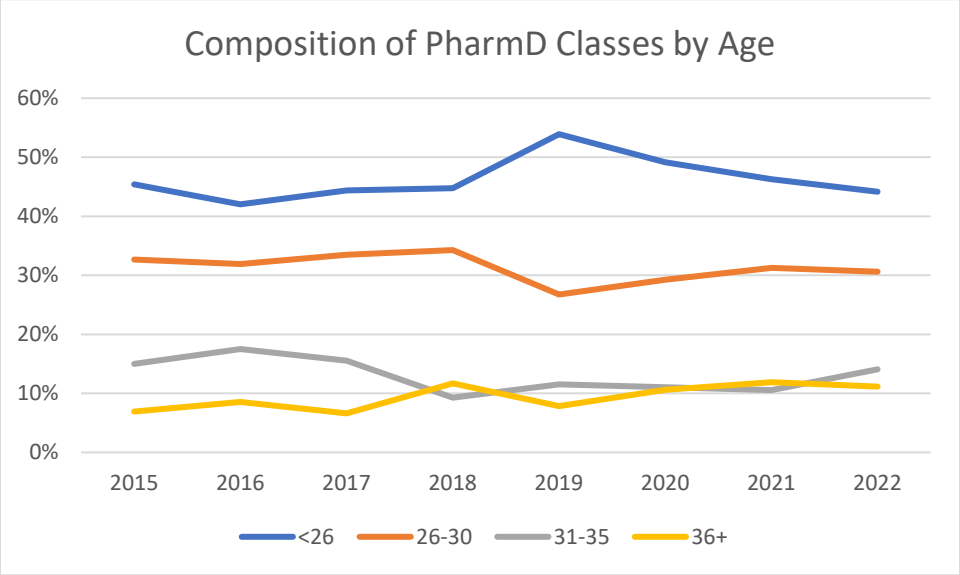


	AA	AS	HI	NAAN	NHOPI	MIX	WH	UNK
2015	2%	17%	0%	0%	0%	3%	75%	3%
2016	0%	24%	1%	0%	0%	1%	73%	1%
2017	0%	33%	1%	0%	0%	1%	58%	3%
2018	0%	30%	1%	0%	0%	2%	56%	6%
2019	0%	22%	7%	1%	0%	2%	66%	1%
2020	2%	21%	7%	0%	4%	4%	61%	1%
2021	0%	19%	4%	0%	1%	4%	67%	6%
2022	1%	17%	8%	0%	0%	10%	52%	12%
2023	0%	28%	4%	0%	0%	6%	51%	11%

AA= African American AS=Asian HI = Hispanic or Latino NAAN= Native American or Alaska Native NHOPI= Native Hawaiian or Other Pacific Islander Mix = 2 or more races WH= White UNK = Unknown

Appendix 9a. (continued)

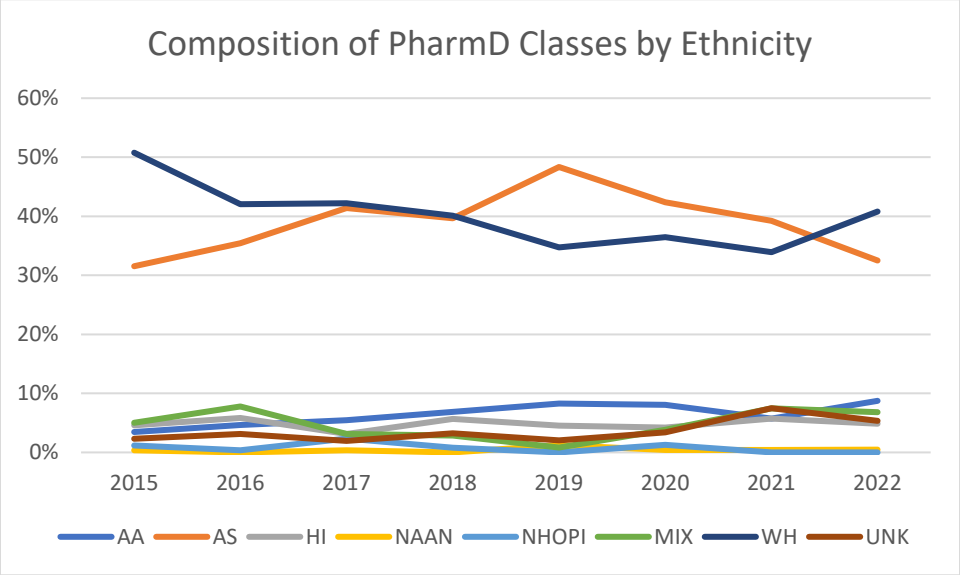
PharmD Composition – by age



	<26	26-30	31-35	36+
2015	45%	33%	15%	7%
2016	42%	32%	18%	9%
2017	44%	33%	16%	7%
2018	45%	34%	9%	12%
2019	54%	27%	12%	8%
2020	49%	29%	11%	11%
2021	46%	31%	11%	12%
2022	44%	31%	14%	11%

Appendix 9a. (continued)

PharmD Composition – by ethnicity

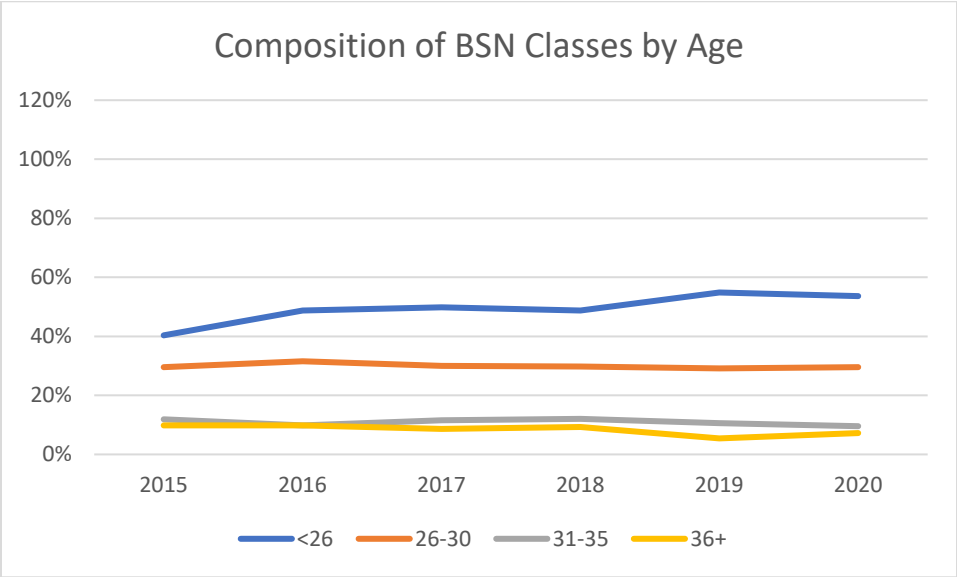


	AA	AS	HI	NAAN	NHOPI	MIX	WH	UNK
2015	3%	32%	5%	0%	1%	5%	51%	2%
2016	5%	35%	6%	0%	0%	8%	42%	3%
2017	5%	41%	3%	0%	2%	3%	42%	2%
2018	7%	40%	6%	0%	1%	3%	40%	3%
2019	8%	48%	5%	1%	0%	1%	35%	2%
2020	8%	42%	4%	0%	1%	4%	36%	3%
2021	6%	39%	6%	0%	0%	7%	34%	7%
2022	9%	33%	5%	0%	0%	7%	41%	5%

AA= African American AS=Asian HI = Hispanic or Latino NAAN= Native American or Alaska Native NHOPI= Native Hawaiian or Other Pacific Islander Mix = 2 or more races WH= White UNK = Unknown

Appendix 9a. (continued)

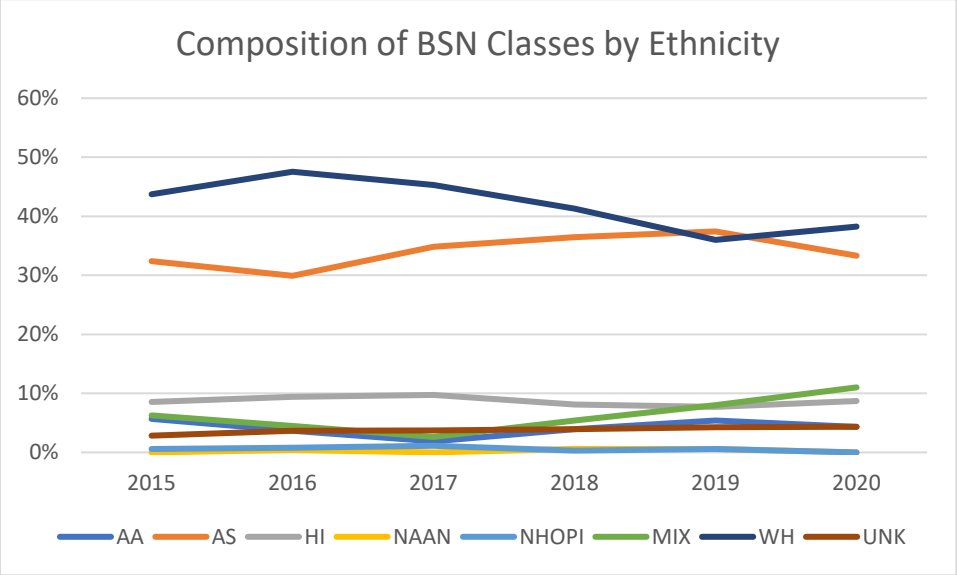
BSN Composition – by age



	<26	26-30	31-35	36+
2015	40%	30%	12%	10%
2016	49%	32%	10%	10%
2017	50%	30%	12%	9%
2018	49%	30%	12%	9%
2019	55%	29%	11%	5%
2020	54%	30%	10%	7%

Appendix 9a. (continued)

BSN Composition – by ethnicity

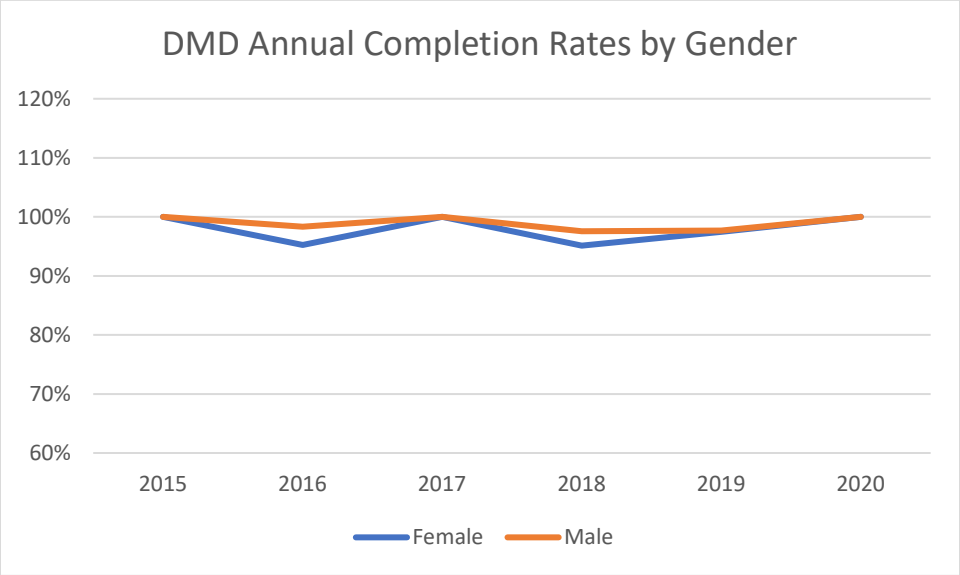


	AA	AS	HI	NAAN	NHOPI	MIX	WH	UNK
2015	6%	32%	9%	0%	1%	6%	44%	3%
2016	4%	30%	9%	0%	1%	5%	48%	4%
2017	2%	35%	10%	0%	1%	3%	45%	4%
2018	4%	36%	8%	1%	0%	5%	41%	4%
2019	5%	37%	8%	1%	1%	8%	36%	4%
2020	4%	33%	9%	0%	0%	11%	38%	4%

AA= African American AS=Asian HI = Hispanic or Latino NAAN= Native American or Alaska Native NHOPI= Native Hawaiian or Other Pacific Islander Mix = 2 or more races WH= White UNK = Unknown

Appendix 9b. Completion rates of DMD, PharmD and BSN Classes 2015-2020 by Gender, Ethnicity and Age.

DMD Completion – by gender



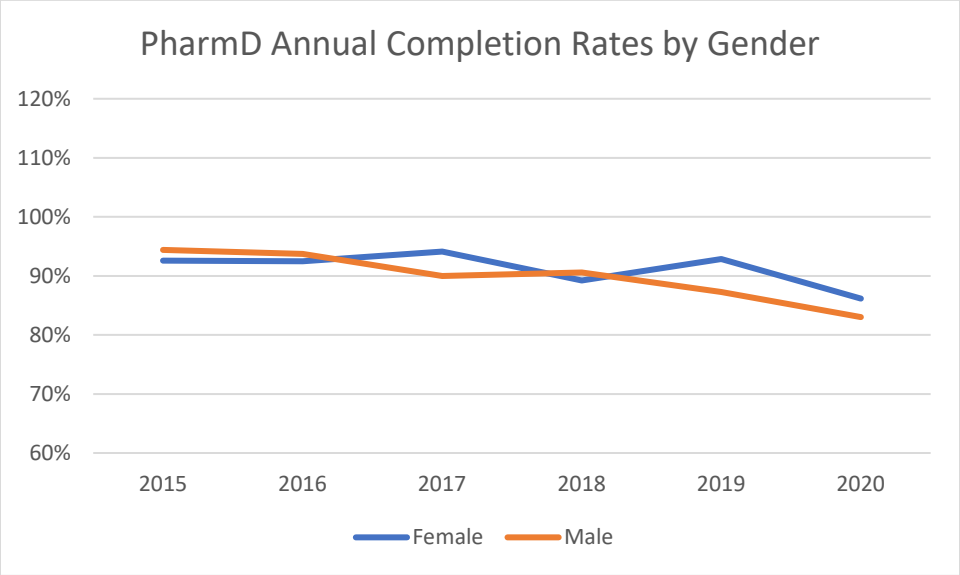
	Female	Male
2015	100%	100%
2016	95%	98%
2017	100%	100%
2018	95%	98%
2019	97%	98%
2020	100%	100%

DMD Completion – by age (Data not shown due to very high completion rates)

DMD Completion – by ethnicity (Data not shown due to very high completion rates)

Appendix 9b. (continued)

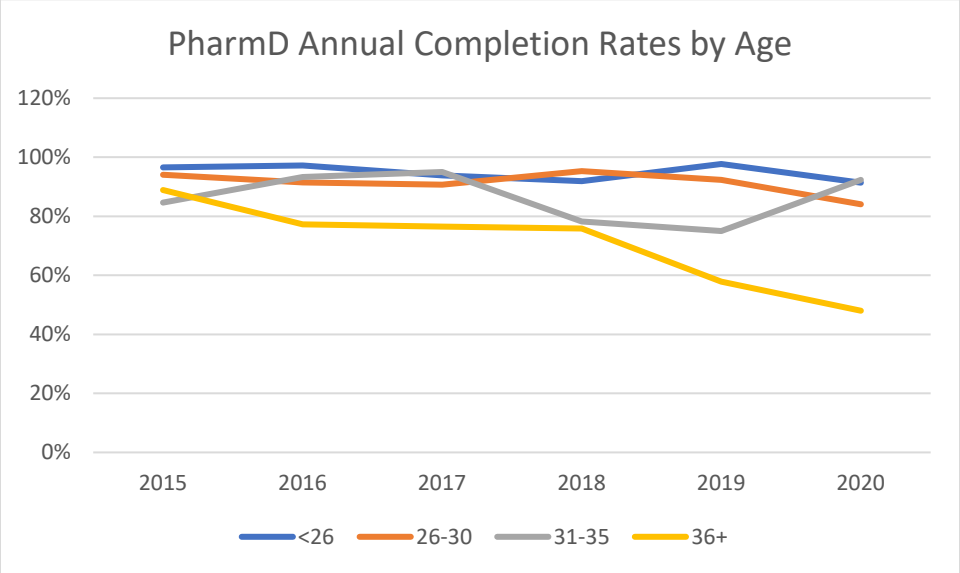
PharmD Completion – by gender



	Female	Male
2015	93%	94%
2016	92%	94%
2017	94%	90%
2018	89%	91%
2019	93%	87%
2020	86%	83%

Appendix 9b. (continued)

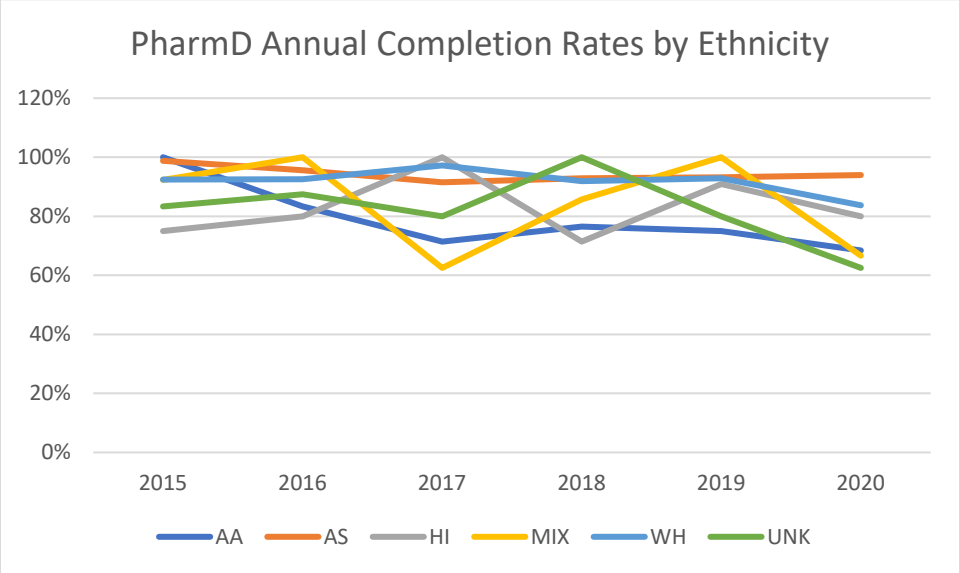
PharmD Completion – by age



	<26	26-30	31-35	36+
2015	97%	94%	85%	89%
2016	97%	91%	93%	77%
2017	94%	91%	95%	76%
2018	92%	95%	78%	76%
2019	98%	92%	75%	58%
2020	91%	84%	92%	48%
2021				
2022				
2023				

Appendix 9b. (continued)

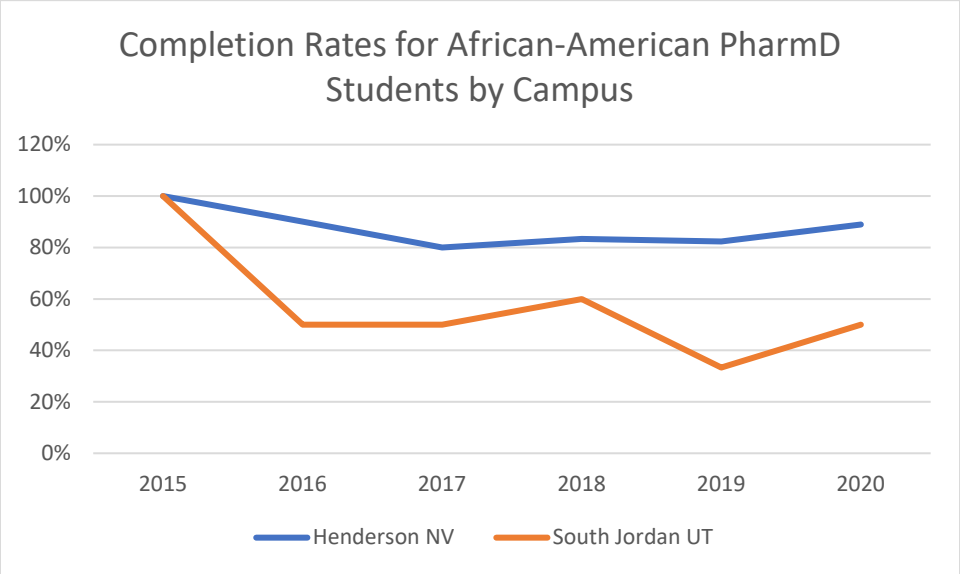
PharmD Completion – by ethnicity



	AA	AS	HI	MIX	WH	UNK
2015	100%	99%	75%	92%	92%	83%
2016	83%	96%	80%	100%	93%	88%
2017	71%	92%	100%	63%	97%	80%
2018	76%	93%	71%	86%	92%	100%
2019	75%	93%	91%	100%	93%	80%
2020	68%	94%	80%	67%	84%	63%

AA= African American AS=Asian HI = Hispanic or Latino Mix = 2 or more races WH= White UNK = Unknown

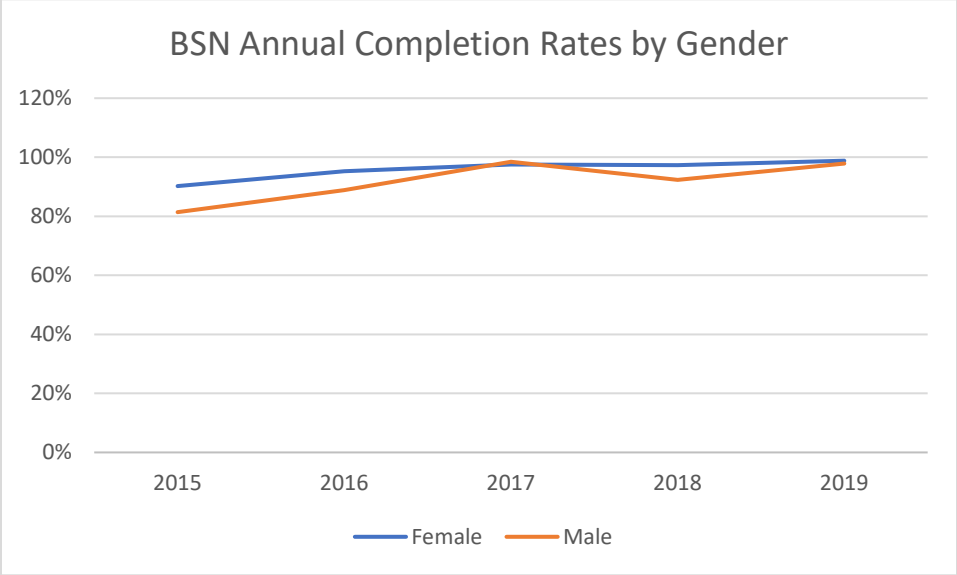
Appendix 9b. (continued)



	Henderson NV	South Jordan UT
2015	100%	100%
2016	90%	50%
2017	80%	50%
2018	83%	60%
2019	82%	33%
2020	89%	50%

Appendix 9b. (continued)

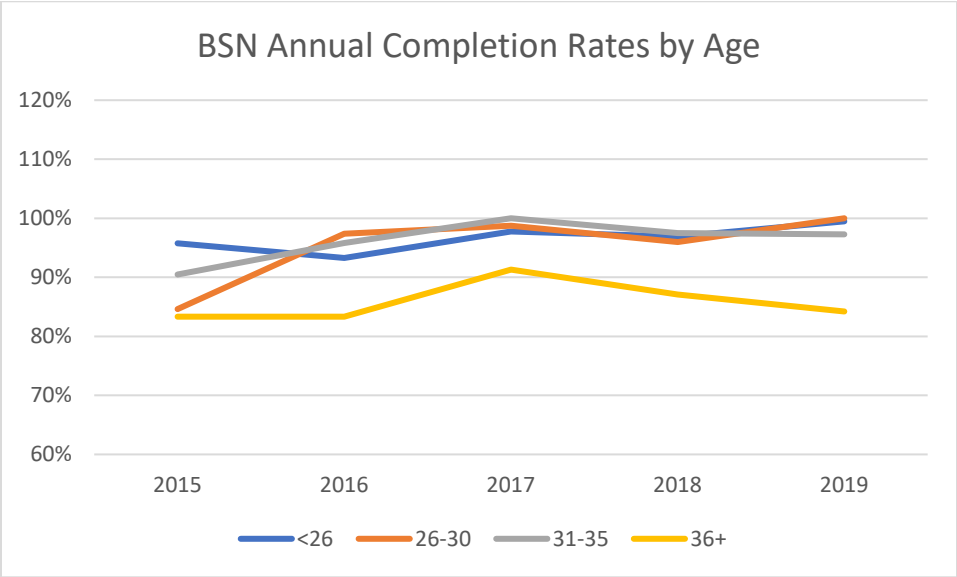
BSN Completion – by gender



	Female	Male
2015	90%	81%
2016	95%	89%
2017	98%	98%
2018	97%	92%
2019	99%	98%

Appendix 9b. (continued)

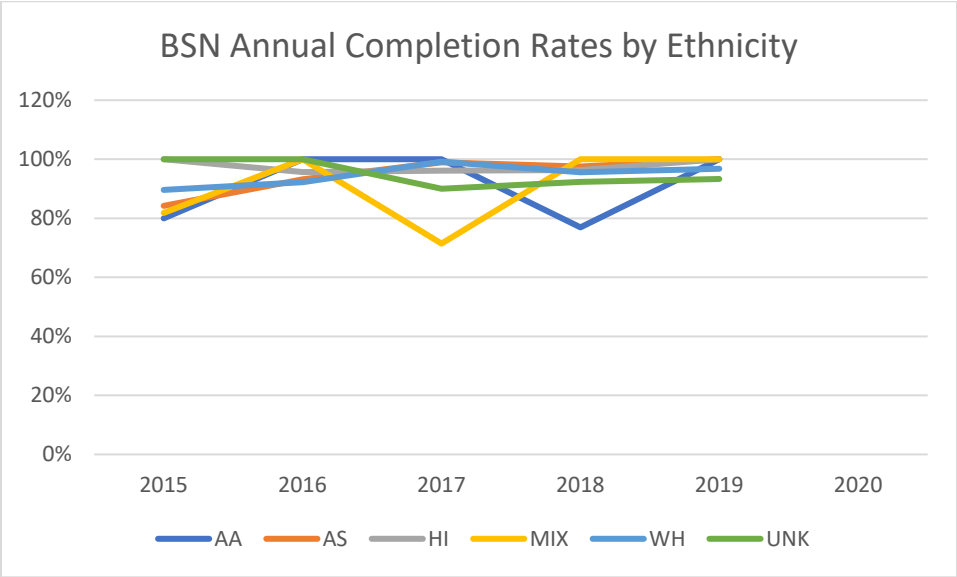
BSN Completion – by age



	<26	26-30	31-35	36+
2015	96%	85%	90%	83%
2016	93%	97%	96%	83%
2017	98%	99%	100%	91%
2018	97%	96%	98%	87%
2019	99%	100%	97%	84%

Appendix 9b. (continued)

BSN Completion – by ethnicity



	AA	AS	HI	MIX	WH	UNK
2015	80%	84%	100%	82%	90%	100%
2016	100%	93%	96%	100%	92%	100%
2017	100%	99%	96%	71%	99%	90%
2018	77%	98%	96%	100%	96%	92%
2019	100%	100%	100%	100%	97%	93%

AA= African American AS=Asian HI = Hispanic or Latino Mix = 2 or more races WH= White UNK = Unknown

Appendix 10. Analysis of Equity Gaps within the DMD Program

As an institution and as a program, we have been proactive in our recruiting efforts to select qualified students that reflect our society as a whole. To put our efforts into context, the State of Utah, according to the Utah Medical Education Council, has few female dentists and/or underrepresented minorities practicing in the state. (See table below)

	STATE OF UTAH (Dentists)	**CODM DMD CLASS ENTERING AUGUST 2020**
Male	95.9% (1789/1865)	49% (50/102)
Female	4.1%(76/1865)	51% (52/102)
Underrepresented Minorities	2.9% (54/1865)	14.7% (15/102)

By contrast our female enrollment was 21% in 2017, 49% in 2018, 45% in 2019 and 44% in 2020. **This year's matriculating class (DMD 2024) is 51% female to 49% male.** A demographic breakdown of this year's matriculating class (DMD 2024) is shown in the table below.

Class of 2024 Statistics, Averages, and Ranges	**Average**	**Min.**	**Max.**
Class Total:	**102**		
Total Males:	**50**		
Total Females:	**52**		
Average Age	**27**	**21**	**47**
Total Minorities:	**15**		
American Indian	**-**		
Hispanic:*	**12**		
Pacific Islander:*	**3**		
Black or African American:*	**3**		
Veteran:*	**5**		
Rural:	**26**		
Urban:	**19**		
Suburban:	**57**		

*Some students identify with one or more of the above categories

Appendix 10. (continued)

It is important to note that the on-time completion/graduation rates **for entire cohorts was 98% for the past 5 years.**

We decided to review other potential areas of equity gaps based on gender, age and ethnicity by disaggregating the data and studying in-course remediation rates (and the incidence of academic probation for the past 5 years. A summary of what we found is listed below:

In Course Remediation Rate by Gender (%)	Class of 2018	Class of 2019	Class of 2020	Class of 2021	Class of 2022
Male	8.64%	39.02%	18.07%	16.67%	8.00%
Female	9.88%	10..98%	9.6%	13.10%	4.00%

In Course Remediation Rate by Ethnicity (%)	Class of 2018	Class of 2019	Class of 2020	Class of 2021	Class of 2022
White	10.39%	18.29%	15.66%	20.00%	8.42%
Asian	7.79%	6.10%	4.82%	7.50%	0.0
Latinx	0.0	2.44%	6.02%	2.50%	1.21%
Black	0.0	0.0	0.0	0.0	0.0
Pacific Islander	0.0	0.0	1.20%	0.0	0.0
Hawaiian	0.0	0.0	0.0	0.0	0.0
American Indian	0.0	0.0	0.0	1.25%	0.0
Native American	0.0	0.0	0.0	0.0	0.0

Academic Probation by Gender (%)	Class of 2018	Class of 2019	Class of 2020	Class of 2021	Class of 2022
Male	1.23%	1.22	1.20	3.57%	1%
Female	2.47%	0.0	0.0	0.0	0.0

Appendix 10. (continued)

Academic Probation by Ethnicity (%)	Class of 2018	Class of 2019	Class of 2020	Class of 2021	Class of 2022
White	1.30%	1.22%	1.20%	2.50%	0.0
Asian	1.30%	0.0	0.0	1.25%	0.0
Latinx	0.0	0.0	0.0	0.0	1.05%
Black	0.0	0.0	0.0	0.0	0.0
Pacific Islander	0.0	0.0	0.0	0.0	0.0
Hawaiian	0.0	0.0	0.0	0.0	0.0
Native American	0.0	0.0	0.0	0.0	0.0

White males, when compared to all groups based on a percentage of both their individual cohort for white males, and against the total combined cohort, had the highest academic probation and remediation rates of any other group.

We have made great strides in gender equality from 14 females in our original class of 64 (22% female) to 52 females in our current class of 102(51%). The gender balance in our applicant pool now mirrors the national (AADSAS) applicant pool. The gender balance in our recent classes is similar to most U.S. dental schools.

The number of minority students applying to, being interviewed and accepted to our DMD program has increased since our program opened. All minority students except one who have matriculated into our program have graduated. One student is delayed due to a medical condition. That said, many minority students decline acceptance to our program. The most frequently cited reason for declining offers of admission involves scholarship offers from other institutions. Several who matriculated received the National Health Service Corps Scholarship which pays for tuition, books and fees and provides a monthly stipend.

CLASS OF 2024	Interviewed	Accepted	Matriculated
Black/African American*	17	10	3
Latinx*	50	26	12
Native American	0	0	0
Pacific Islander*	7	4	3

* Some applicants identify with more than one category.

Further analysis revealed that of the 50 Latinx students interviewed, none were denied. Of the 17 Black/African Americans interviewed, only one was denied. Others who did not matriculate did not accept our offers.

Although the number of minority applicants has increased since our initial year of operation, we are actively recruiting underrepresented minorities at major “feeder” institutions throughout the country.

Appendix 10. (continued)

Within Utah, we are developing our college pipelines within Utah at DSU, Southern Utah University and Utah Valley University and in high school programs through our partnership with the local Area Health Education Centers (AHEC). Several CODM administrators serve on the AHEC Board and several DMD students volunteer as mentors with the AHEC Scholar program. This program focuses on helping students from impacted communities pursue health care careers.

We also decided to look at the environments where students grew up – rural, suburban, urban. Two years ago, we adapted our application site to ask students to identify the area(s) with which they identify. We did the same on our University's secondary application. As a result, we determined that those from all three areas are able to access our interview and acceptance processes. For the Class of 2024 that matriculated in August 2020, 26 self-identified as being from rural backgrounds, 19 from urban areas and 57 from suburban areas.

Roseman DMD students are also diverse in terms of relationship status. More than a third of our current students are married, some have 1 or more children, other students are single without partners, some are in significant relationships while others are single parents. The percentage of married students has varied with each class, beginning at 50% of our initial class (2015). All students learn the challenges faced in various relationships from working with each other. Individuals within DMD's educational community reflect multiple orientations when describing themselves individually and when in relationships. Despite the prominent religion in Utah, students report faith-based affiliations with most major world religions.

Our selection process emphasizes the individual differences each student will contribute to our educational program, the delivery of patient care in the communities we serve. We also recognize that they serve as role models for future health care providers. Our team-based approach to education, including the Six-Point Mastery Learning Model and our vertical-tiered clinical model, enables students to contribute to and learn from other team members in all didactic and clinical settings. Rotating team membership throughout the program provides many opportunities for each student to work with others who have different backgrounds, skills and experiences. This makes individual differences meaningful for providing care to diverse patient populations and for working effectively in health care teams.