



Board of Trustees
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November 6, 2017

TO: Members of the Academic & Student Affairs Committee

FR: Ellen N. Doughty, Interim Clerk of the Board

RE: **November 6, 2017 Academic & Student Affairs Committee Meeting**

The University of Maine

University of Maine
at Augusta

University of Maine
at Farmington

University of Maine
at Fort Kent

University of Maine
at Machias

University of Maine
at Presque Isle

University of
Southern Maine

The Academic & Student Affairs Committee will meet from **9:00 am to 12:00 pm on Monday, November 6, 2017**. The meeting will be held at the University of Maine System Executive Offices in the Rudman Conference Room, 253 Estabrooke Hall, 15 Estabrooke Drive in Orono. The following Polycom sites are available:

- UMA – President's Boardroom, Alumni Center
- UMA (Bangor Campus) – Room 125, Lewiston Hall
- UMF – Executive Conference Room 103, Merrill Hall
- UMFK – Alumni Conference Room, Nadeau Hall
- UMM – Executive Conference Room, Powers Hall
- UMPI – HR Conference Room, Preble Hall
- USM – 423/424 Glickman Library, Portland
- Phone – 1-800-605-5167 Passcode 743544#

Refreshments will be available at the UMS, UMA and the USM locations. The meeting materials are posted to the Diligent Board portal under the Academic and Student Affairs Committee section. In addition, the materials are posted on the Board of Trustees website (<http://www.maine.edu/about-the-system/board-of-trustees/meeting-agendas/academic-student-affairs-committee/>). If you have questions about the meeting arrangements or accessing the meeting materials, please call me at 581-5840.

If you have any questions or desire additional information about the agenda items, please call Robert Neely at 581-5843 or Rosa Redonnett at 621-3419.

cc: Trustees not on the Academic and Student Affairs Committee
James Page, Chancellor
Faculty & Student Representatives
Presidents
Ryan Low
Robert Neely
Rosa Redonnett

Board of Trustees

Academic and Student Affairs Committee

November 6, 2017, 9:00 am to 12:00 pm
Rudman Conference Room, 253 Estabrooke Hall, Orono

Agenda

9:00-9:20am

Tab 1 [Fall Enrollment Report](#)

9:20-9:25am

Tab 2 [Awarding of Academic Degrees](#)

9:25-9:35am

Tab 3 [Academic Calendar: AY 2018-2019; AY 2019-2020](#)

9:35-9:50am

Tab 4 [Nursing Summit: Debrief](#)

9:50-10:10am

Tab 5 [University of Maine Name Change Requests](#)

10:10-10:45am

Tab 6 [Early College: Discussion](#)

10:45-11:00am

Tab 7 [Maine Geospatial Institute: Overview and Discussion](#)

11:00-11:15am

Tab 8 [Program Approval: World Language Education](#)

11:15-11:30am

Tab 9 [Graduate Research Programs: Student Experience](#)

11:30-11:45

Tab 10 [Faculty Representatives: Discussion](#)

11:45-12Noon

Tab 11 [Student Representatives: Discussion](#)

Action items are noted in red.

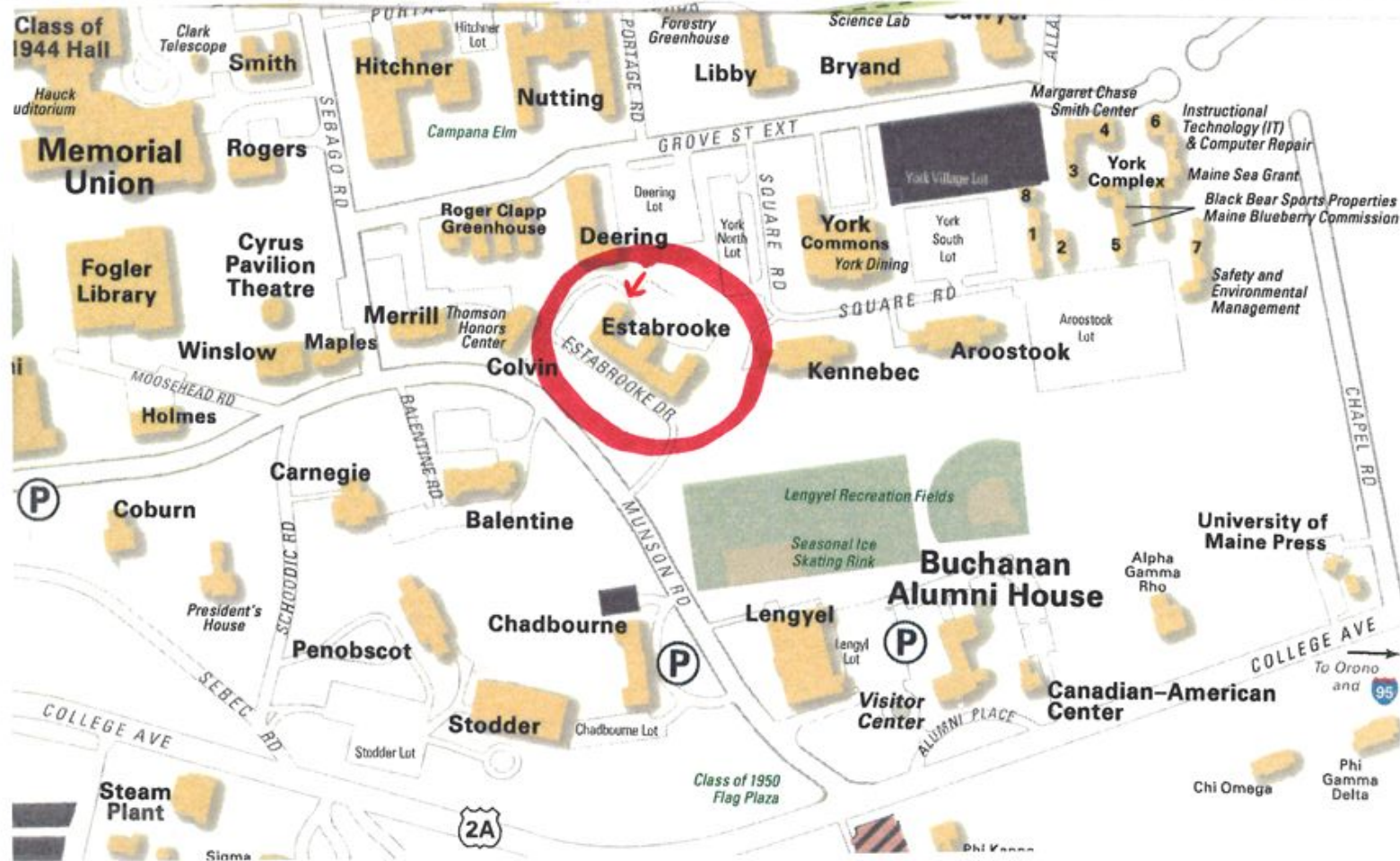
Note: Times are estimated based upon the anticipated length for presentation or discussion of a particular topic.

An item may be brought up earlier or the order of items changed for effective deliberation of matters before the Committee.

University of Maine System

15 Estabrooke Drive, Orono

Rudman Conference Room
253 Estabrooke Hall, 2nd Floor
15 Estabrooke Drive, Orono



Directions to the UMS located on the UMaine Campus

From the South on I-95: take exit 191 to Kelly Road and turn right. Continue on Kelly Road for 1 mile until you reach the traffic light, then turn left onto Route 2 and go through downtown Orono. Cross the river. Turn left at the lights onto College Avenue. Buchanan Alumni House will be the first campus-related building on your right. Right after the Buchanan Alumni House, take a right onto Muson Road. Estabrooke Hall is the building on the right after Lengyel.

From the North on I-95: take exit 191 to Kelly Road and turn left. Continue on Kelly Road for 1 mile until you reach the traffic light, then turn left onto Route 2 and go through downtown Orono. Cross the river. Turn left at the lights onto College Avenue. Buchanan Alumni House will be the first campus-related building on your right. Right after the Buchanan Alumni House, take a right onto Muson Road. Estabrooke Hall is the building on the right after Lengyel.

The UMS is located on the 2nd floor of Estabrooke Hall. Enter Estabrooke Hall from the back of the building, the entrance closes to Deering Hall.



University of Maine System

Fall 2017

Enrollment Report

Robert Zuercher, UMS Senior Institutional Research & Planning Analyst
Justin Young, UMS Senior Institutional Research & Planning Analyst
October 24, 2017

Fall 2017 Enrollment Report – The University of Maine System

INTRODUCTION

The following report provides summary information regarding enrollment at the University of Maine System for the 2017 Fall Semester. All data reported is as of the census date, October 15, 2017.

Notes:

1. Some totals may not appear to sum correctly due to rounding (e.g., percentages).
2. USM graduate student figures include the University of Maine School of Law.

Data Source: PeopleSoft Database; the University of Maine System; 10/15/2017.

Fall 2017 Enrollment Report – The University of Maine System

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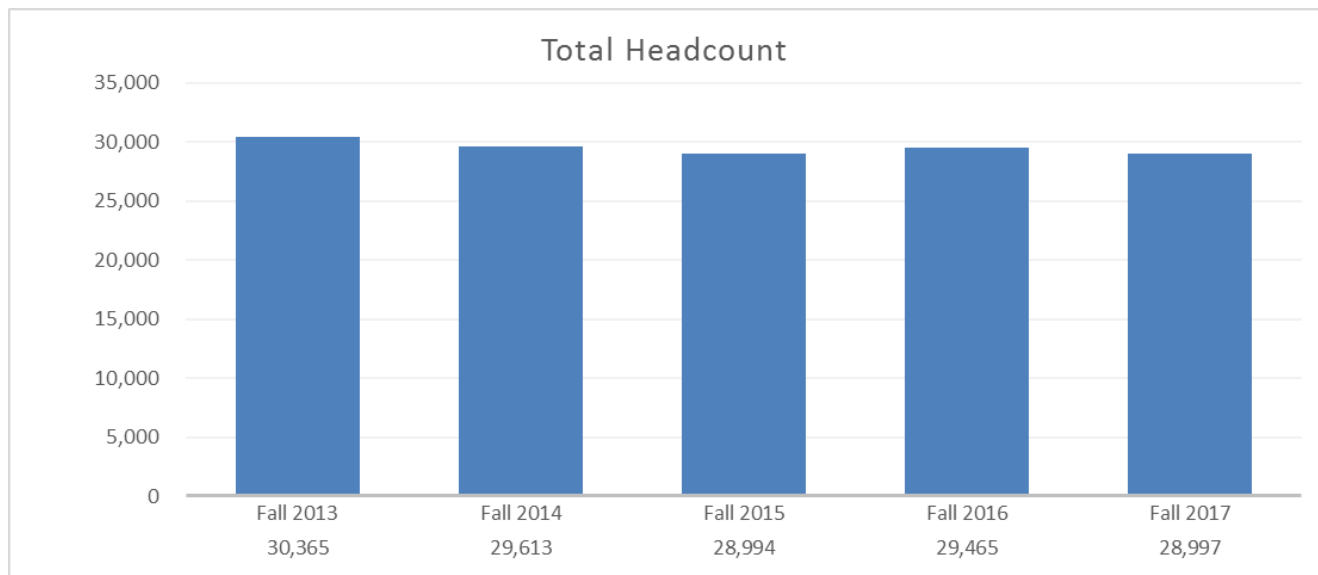
HIGHLIGHTS

- Compared to Fall 2016, undergraduate credit hours are down slightly (-0.6%) across the system. USM, UMPI, and UM experienced increases in undergraduate credit hours compared to last fall, while these credit hours declined at UMA, UMFK, and UMM. In the case of UMFK, however, this was the first decline in undergraduate credit hours in the past five years.
- For the first time in the past five years, credit hours among Early College students experienced a decline (an 11% drop across the system). Similar trends were apparent with respect to total headcounts. The one-year decline in both undergraduate credit hours (specifically non-degree undergraduate credit hours) and headcount is almost entirely attributable to this drop in Early College. Only one institution (UMF) saw growth since last fall in Early College. Early college credit hours are 3.7% of total undergraduate credit hours.
- Graduate student credit hours increased 2.8% since Fall 2016 (a second year of consistent growth). UMF witnessed the strongest and most consistent growth in graduate student credit hours (although such credit hours only account for 3.2% of UMF's overall credit hours this fall). Graduate credit hours grew at both UM and USM since last Fall.
- There has been significant growth in credit hours among out-of-state students (up 52% since Fall 2013, 16% since Fall 2016) and NEBHE students (up 13% since 2013, down 4% since Fall 2016). Meanwhile, credit hours among in-state students declined 12% over the past five years (3.8% since 2016). Credit hours and headcounts have declined substantially at the Associate-degree level, driven largely by the elimination of two-year degree programs across the system in recent years.
- The number of First-time students entering in Fall 2017 increased 2.5% over 2016, returning to levels not seen since Fall 2013, while transfer-in students are down compared to both 2016 and five years ago.
- Compared to either a year ago or five years ago, there are now more Black/African American, Hispanic/Latino, Asian, and multi-racial/ethnic students enrolled in the UMS, mirroring a trend being reflected nationally. The total number of white students declined nearly 1% since last year and 6% in the past five years, while the total number of American Indian/Alaskan Native students has dropped by 8% since Fall 2016 (and by nearly 22% in the last five years).
- The delivery of credit hours continued to shift toward Distance Education—toward Distance Online in particular, which grew by more than 2% since last year (while all other forms of Distance Education declined). Traditional campus credit hours declined only slightly over the past year (by 0.2%), and have declined by 5.6% over the past five years. Distance online represents 86% of all distance education and 17.2% of all credit hours.

Fall 2017 Enrollment Report – The University of Maine System

Headcount by Campus and Student Level

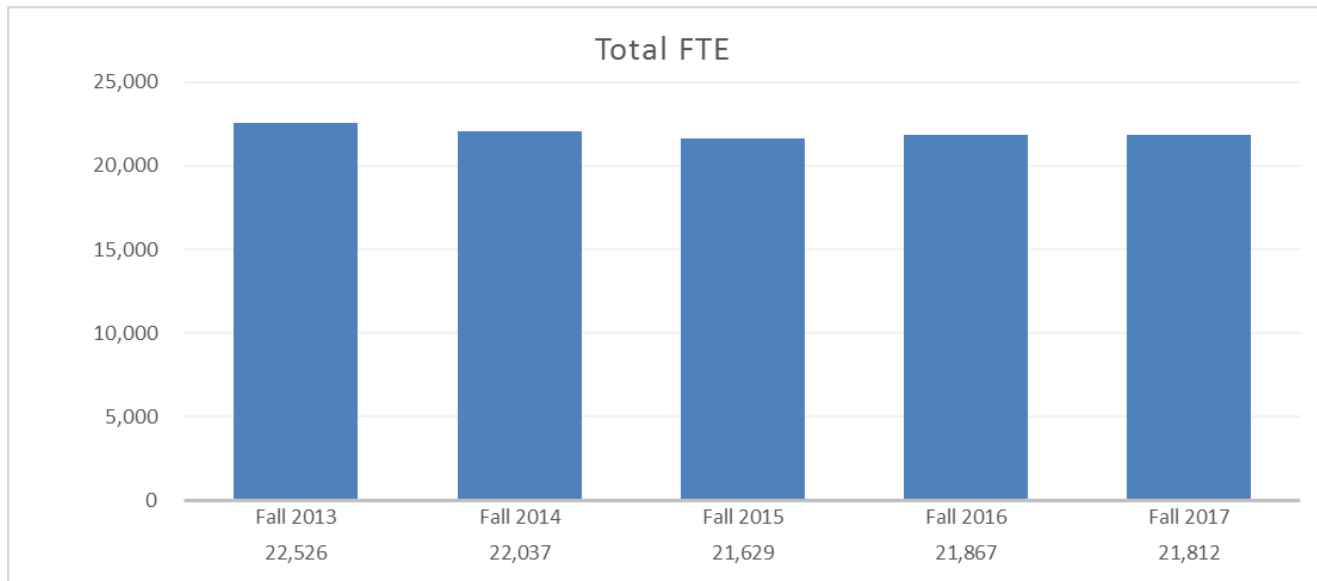
		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	% Change		Trend Line
								1-year	5-year	
UM	Undergraduate	9,182	9,339	9,297	9,323	9,279	82.6%	-0.5%	1.1%	
	Graduate	2,065	1,947	1,625	1,896	1,961	17.4%	3.4%	-5.0%	
	Total	11,247	11,286	10,922	11,219	11,240	100.0%	0.2%	-0.1%	
UMA	Undergraduate	4,770	4,664	4,683	4,416	4,014	100.0%	-9.1%	-15.8%	
	Graduate	0	0	0	0	0	0.0%	N/A	N/A	
	Total	4,770	4,664	4,683	4,416	4,014	100.0%	-9.1%	-15.8%	
UMF	Undergraduate	1,901	1,773	1,795	1,782	1,811	87.1%	1.6%	-4.7%	
	Graduate	160	187	221	218	269	12.9%	23.4%	68.1%	
	Total	2,061	1,960	2,016	2,000	2,080	100.0%	4.0%	0.9%	
UMFK	Undergraduate	1,209	1,327	1,559	1,904	1,760	100.0%	-7.6%	45.6%	
	Graduate	0	0	0	0	0	0.0%	N/A	N/A	
	Total	1,209	1,327	1,559	1,904	1,760	100.0%	-7.6%	45.6%	
UMM	Undergraduate	892	810	786	745	701	100.0%	-5.9%	-21.4%	
	Graduate	0	0	0	0	0	0.0%	N/A	N/A	
	Total	892	810	786	745	701	100.0%	-5.9%	-21.4%	
UMPI	Undergraduate	1,263	1,138	1,289	1,326	1,408	100.0%	6.2%	11.5%	
	Graduate	0	0	0	0	0	0.0%	N/A	N/A	
	Total	1,263	1,138	1,289	1,326	1,408	100.0%	6.2%	11.5%	
USM	Undergraduate	7,098	6,628	6,126	6,189	6,110	78.4%	-1.3%	-13.9%	
	Graduate	1,825	1,800	1,613	1,666	1,684	21.6%	1.1%	-7.7%	
	Total	8,923	8,428	7,739	7,855	7,794	100.0%	-0.8%	-12.7%	
Total	Undergraduate	26,315	25,679	25,535	25,685	25,083	86.5%	-2.3%	-4.7%	
	Graduate	4,050	3,934	3,459	3,780	3,914	13.5%	3.5%	-3.4%	
	Total	30,365	29,613	28,994	29,465	28,997	100.0%	-1.6%	-4.5%	



Fall 2017 Enrollment Report – The University of Maine System

FTE by Campus and Student Level

		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	% Change		Trend Line
								1-year	5-year	
UM	Undergraduate	8,184	8,393	8,378	8,526	8,635	88.8%	1.3%	5.5%	
	Graduate	1,171	1,119	993	1,068	1,085	11.2%	1.6%	-7.4%	
	Total	9,356	9,512	9,371	9,594	9,720	100.0%	1.3%	3.9%	
UMA	Undergraduate	2,713	2,615	2,626	2,422	2,169	100.0%	-10.5%	-20.1%	
	Graduate	0	0	0	0	0	0.0%	N/A	N/A	
	Total	2,713	2,615	2,626	2,422	2,169	100.0%	-10.5%	-20.1%	
UMF	Undergraduate	1,745	1,624	1,645	1,626	1,628	94.4%	0.1%	-6.7%	
	Graduate	62	72	79	83	96	5.6%	15.3%	54.9%	
	Total	1,807	1,695	1,724	1,709	1,723	100.0%	0.9%	-4.6%	
UMFK	Undergraduate	805	838	911	1,052	950	100.0%	-9.7%	18.0%	
	Graduate	0	0	0	0	0	0.0%	N/A	N/A	
	Total	805	838	911	1,052	950	100.0%	-9.7%	18.0%	
UMM	Undergraduate	542	516	493	492	452	100.0%	-8.1%	-16.6%	
	Graduate	0	0	0	0	0	0.0%	N/A	N/A	
	Total	542	516	493	492	452	100.0%	-8.1%	-16.6%	
UMPI	Undergraduate	843	779	823	885	903	100.0%	2.0%	7.2%	
	Graduate	0	0	0	0	0	0.0%	N/A	N/A	
	Total	843	779	823	885	903	100.0%	2.0%	7.2%	
USM	Undergraduate	5,074	4,712	4,404	4,440	4,580	77.7%	3.1%	-9.7%	
	Graduate	1,386	1,370	1,277	1,273	1,315	22.3%	3.3%	-5.1%	
	Total	6,460	6,083	5,681	5,713	5,894	100.0%	3.2%	-8.8%	
Total	Undergraduate	19,907	19,476	19,280	19,443	19,316	88.6%	-0.7%	-3.0%	
	Graduate	2,619	2,561	2,349	2,424	2,495	11.4%	3.0%	-4.7%	
	Total	22,526	22,037	21,629	21,867	21,812	100.0%	-0.3%	-3.2%	

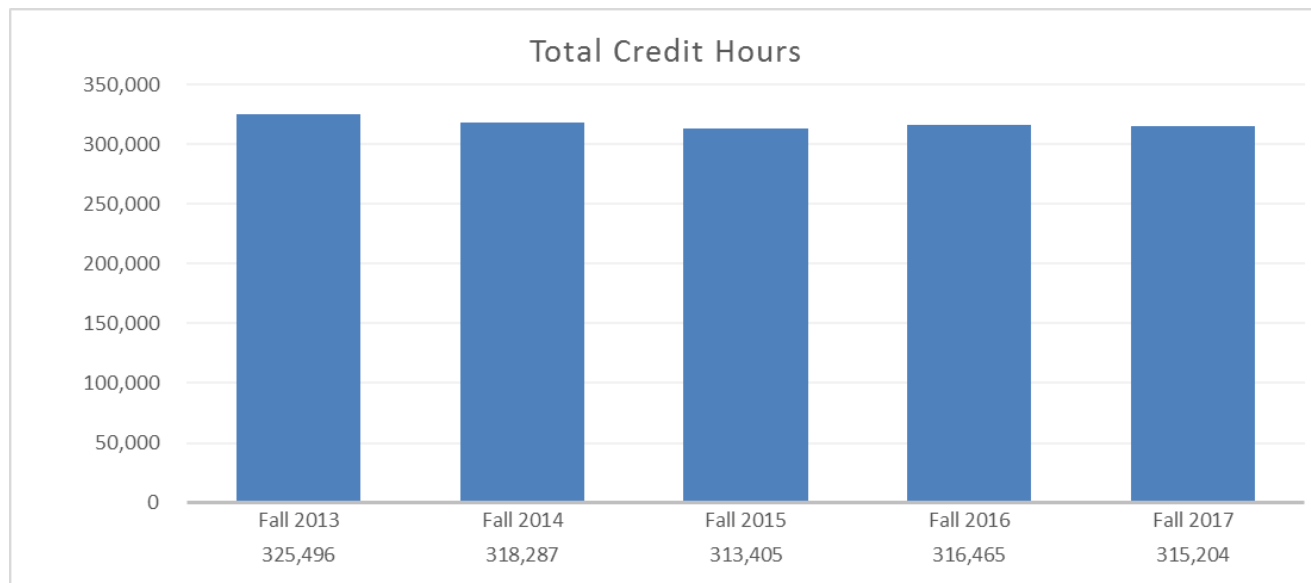


Note: The formula for calculating Fall FTE (for all campuses except UMF starting in Fall 2006) is as follows:
 Fall Undergraduate Credit Hours/15 + Fall Professional (Law) Credit Hours/15 + Fall Graduate Credit Hours/9 = Fall FTE + UMF: Fall Undergraduate Credit Hours/16 + Fall Graduate Credit Hours/9 = Fall FTE

Fall 2017 Enrollment Report – The University of Maine System

Credit Hours by Campus and Student Level

		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	% Change		Trend Line
								1-year	5-year	
UM	Undergraduate	122,767	125,898	125,673	127,895	129,520	93.0%	1.3%	5.5%	
	Graduate	10,543	10,067	8,936	9,609	9,767	7.0%	1.6%	-7.4%	
	Total	133,310	135,965	134,609	137,504	139,287	100.0%	1.3%	4.5%	
UMA	Undergraduate	40,690	39,219	39,390	36,332	32,531	100.0%	-10.5%	-20.1%	
	Graduate	0	0	0	0	0	0.0%	N/A	N/A	
	Total	40,690	39,219	39,390	36,332	32,531	100.0%	-10.5%	-20.1%	
UMF	Undergraduate	27,927	25,980	26,320	26,008	26,043	96.8%	0.1%	-6.7%	
	Graduate	556	644	714	747	861	3.2%	15.3%	54.9%	
	Total	28,483	26,624	27,034	26,755	26,904	100.0%	0.6%	-5.5%	
UMFK	Undergraduate	12,081	12,565	13,658	15,780	14,256	100.0%	-9.7%	18.0%	
	Graduate	0	0	0	0	0	0.0%	N/A	N/A	
	Total	12,081	12,565	13,658	15,780	14,256	100.0%	-9.7%	18.0%	
UMM	Undergraduate	8,131	7,736	7,394	7,384	6,785	100.0%	-8.1%	-16.5%	
	Graduate	0	0	0	0	0	0.0%	N/A	N/A	
	Total	8,131	7,736	7,394	7,384	6,785	100.0%	-8.1%	-16.5%	
UMPI	Undergraduate	12,638	11,685	12,351	13,275	13,543	100.0%	2.0%	7.2%	
	Graduate	0	0	0	0	0	0.0%	N/A	N/A	
	Total	12,638	11,685	12,351	13,275	13,543	100.0%	2.0%	7.2%	
USM	Undergraduate	76,111	70,682	66,053	66,603	68,697	83.9%	3.1%	-9.7%	
	Graduate	14,053	13,811	12,917	12,832	13,202	16.1%	2.9%	-6.1%	
	Total	90,164	84,493	78,970	79,435	81,899	100.0%	3.1%	-9.2%	
Total	Undergraduate	300,344	293,765	290,838	293,277	291,375	92.4%	-0.6%	-3.0%	
	Graduate	25,152	24,522	22,567	23,188	23,830	7.6%	2.8%	-5.3%	
	Total	325,496	318,287	313,405	316,465	315,204	100.0%	-0.4%	-3.2%	



Fall 2017 Enrollment Report – The University of Maine System

Fall 2017 Early College Students by Campus and Primary Academic Plan

	Primary Academic Plan	Head Count	% Total Underg	FTE	% Total Underg	Credit Hours	% Total Underg
UM	Academ-e	125	1.3%	28.7	0.3%	430	0.3%
	Aspirations	13	0.1%	3.5	0.0%	52	0.0%
	Bridge-Year	6	0.1%	1.6	0.0%	24	0.0%
	UM Early College Total	144	1.6%	33.7	0.4%	506	0.4%
	UM Undergraduate Total	9,279	100.0%	8,635.0	100.0%	129,520	100.0%
UMA	Aspirations	222	5.5%	54.6	2.5%	819	2.5%
	Bridge-Year	166	4.1%	101.5	4.7%	1,523	4.7%
	Dual Enrollment	9	0.2%	3.0	0.1%	45	0.1%
	UMA Early College Total	397	9.9%	159.1	7.3%	2,387	7.3%
	UMA Undergraduate Total	4,014	100.0%	2,169.0	100.0%	32,531	100.0%
UMF	Aspirations	47	2.6%	12.3	0.8%	196	0.8%
	UMF Early College Total	47	0.5%	12.3	0.1%	196	0.1%
	UMF Undergraduate Total	1,811	100.0%	1,628.0	100.0%	26,043	100.0%
UMFK	Aspirations	215	12.2%	64.5	6.8%	968	6.8%
	Dual Enrollment	442	25.1%	112.7	11.9%	1,690	11.9%
	UMFK Early College Total	657	37.3%	177.2	18.7%	2,658	18.6%
	UMFK Undergraduate Total	1,760	100.0%	950.0	100.0%	14,256	100.0%
UMM	Aspirations	69	9.8%	17.9	4.0%	269	4.0%
	UMM Early College Total	69	9.8%	17.9	4.0%	269	4.0%
	UMM Undergraduate Total	701	100.0%	452.0	100.0%	6,785	100.0%
UMPI	Aspirations	44	3.1%	10.7	1.2%	161	1.2%
	Dual Enrollment	415	29.5%	172.1	19.1%	2,581	19.1%
	UMPI Early College Total	459	32.6%	182.8	20.2%	2,742	20.2%
	UMPI Undergraduate Total	1,408	100.0%	903.0	100.0%	13,543	100.0%
USM	Aspirations	126	2.1%	36.2	0.8%	544	0.8%
	Bridge-Year	10	0.2%	6.3	0.8%	94	0.1%
	Dual Enrollment	364	6.0%	102.0	2.2%	1,530	2.2%
	USM Early College Total	500	8.2%	144.5	3.2%	2,167	3.2%
	USM Undergraduate Total	6,110	100.0%	4,580.0	100.0%	68,697	100.0%
Total	Academ-e	125	0.5%	28.7	0.1%	430	0.1%
	Aspirations	736	2.9%	199.8	1.0%	3,009	1.0%
	Bridge-Year	182	0.7%	109.4	0.6%	1,641	0.6%
	Dual Enrollment	1,230	4.9%	389.7	2.0%	5,846	2.0%
	Total Early College	2,273	9.1%	727.5	3.8%	10,925	3.7%
	Total Undergraduate	25,083	100.0%	19,317.0	100.0%	291,375	100.0%

Notes:

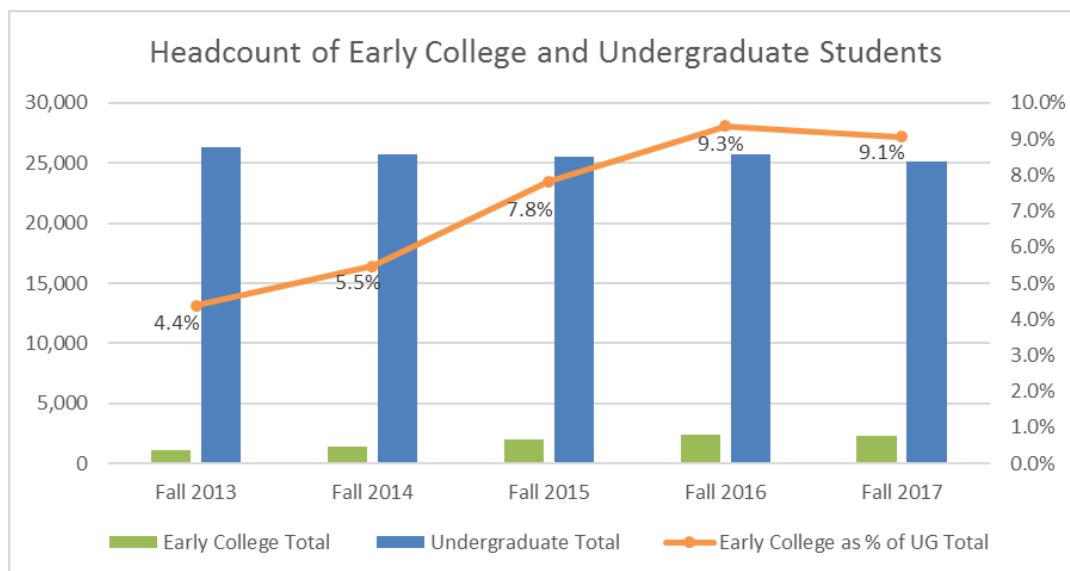
1. Early college majors obtained by academic plan.
2. Early college students appearing in both the aspirations and dual enrollment categories count as aspirations for the purpose of this analysis.

Fall 2017 Enrollment Report – The University of Maine System

Headcount of Early College and Undergraduate Students by Campus

		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% Change	
							1-year	5-year
UM	Early College Total	182	263	235	230	144	-37.4%	-20.9%
	Undergraduate Total	9,182	9,339	9,297	9,323	9,279	-0.5%	1.1%
	Early College as % of UG Total	2.0%	2.8%	2.5%	2.5%	1.6%	-0.9%	-0.4%
UMA	Early College Total	108	235	373	394	397	0.8%	267.6%
	Undergraduate Total	4,770	4,664	4,683	4,416	4,014	-9.1%	-15.8%
	Early College as % of UG Total	2.3%	5.0%	8.0%	8.9%	9.9%	1.0%	7.6%
UMF	Early College Total	0	8	12	9	47	422.2%	N/A
	Undergraduate Total	1,901	1,773	1,795	1,782	1,811	1.6%	-4.7%
	Early College as % of UG Total	N/A	0.5%	0.7%	0.5%	2.6%	2.1%	N/A
UMFK	Early College Total	125	265	479	755	657	-13.0%	425.6%
	Undergraduate Total	1,209	1,327	1,559	1,904	1,760	-7.6%	45.6%
	Early College as % of UG Total	10.3%	20.0%	30.7%	39.7%	37.3%	-2.3%	27.0%
UMM	Early College Total	84	81	91	70	69	-1.4%	-17.9%
	Undergraduate Total	892	810	786	745	701	-5.9%	-21.4%
	Early College as % of UG Total	9.4%	10.0%	11.6%	9.4%	9.8%	0.4%	0.4%
UMPI	Early College Total	91	86	256	388	459	18.3%	404.4%
	Undergraduate Total	1,263	1,138	1,289	1,326	1,408	6.2%	11.5%
	Early College as % of UG Total	7.2%	7.6%	19.9%	29.3%	32.6%	3.3%	25.4%
USM¹	Early College Total	562	468	552	555	500	-9.9%	-11.0%
	Undergraduate Total	7,098	6,628	6,126	6,189	6,110	-1.3%	-13.9%
	Early College as % of UG Total	7.9%	7.1%	9.0%	9.0%	8.2%	-0.8%	0.3%
Total	Early College Total	1,152	1,406	1,998	2,401	2,273	-5.3%	97.3%
	Undergraduate Total	26,315	25,679	25,535	25,685	25,083	-2.3%	-4.7%
	Early College as % of UG Total	4.4%	5.5%	7.8%	9.3%	9.1%	-0.3%	4.7%

1. For USM, the Fall 2016 Enrollment report did not identify the 16 Bridge Year students and reported an Early College headcount of 539.

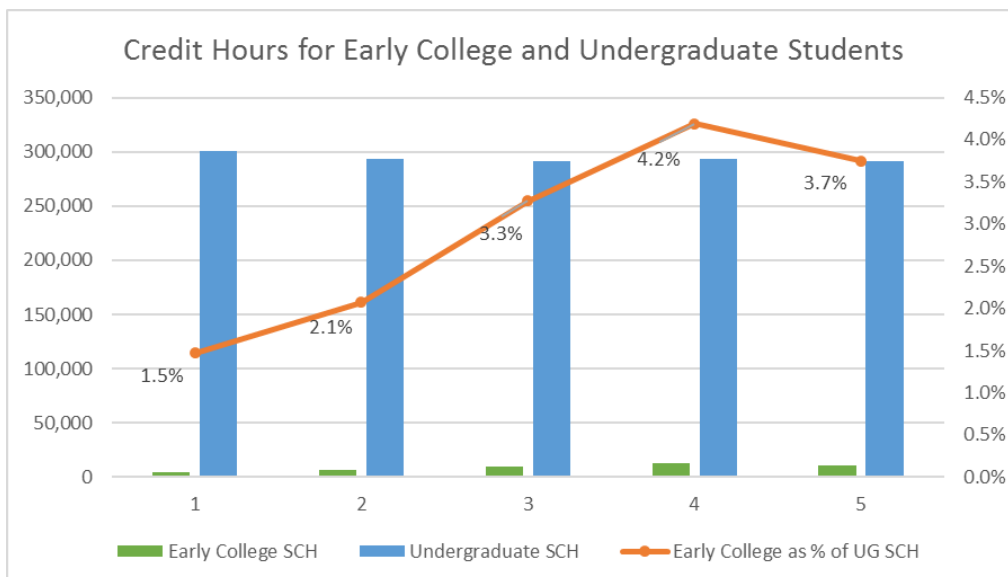


Fall 2017 Enrollment Report – The University of Maine System

Credit Hours for Early College and Undergraduate Students by Campus

		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% Change	
							1-year	5-year
UM	Early College SCH	592	1,448	890	760	506	-33.4%	-14.5%
	Undergraduate SCH	122,767	125,898	125,673	127,895	129,520	1.3%	5.5%
	Early College as % of UG SCH	0.5%	1.2%	0.7%	0.6%	0.4%	-0.2%	-0.1%
UMA	Early College SCH	404	959	2,707	2,889	2,387	-17.4%	490.8%
	Undergraduate SCH	40,690	39,219	39,390	36,332	32,531	-10.5%	-20.1%
	Early College as % of UG SCH	1.0%	2.4%	6.9%	8.0%	7.3%	-0.6%	6.3%
UMF	Early College SCH	-	29	56	34	196	476.5%	N/A
	Undergraduate SCH	27,927	25,980	26,320	26,008	26,043	0.1%	-6.7%
	Early College as % of UG SCH	N/A	0.1%	0.2%	0.1%	0.8%	0.6%	N/A
UMFK	Early College SCH	562	1,110	2,031	3,099	2,658	-14.2%	373.0%
	Undergraduate SCH	12,081	12,565	13,658	15,780	14,256	-9.7%	18.0%
	Early College as % of UG SCH	4.7%	8.8%	14.9%	19.6%	18.6%	-1.0%	14.0%
UMM	Early College SCH	280	294	301	266	269	1.1%	-3.9%
	Undergraduate SCH	8,131	7,736	7,394	7,384	6,785	-8.1%	-16.6%
	Early College as % of UG SCH	3.4%	3.8%	4.1%	3.6%	4.0%	0.4%	0.5%
UMPI	Early College SCH	294	317	1,191	2,789	2,742	-1.7%	832.7%
	Undergraduate SCH	12,638	11,685	12,351	13,275	13,543	2.0%	7.2%
	Early College as % of UG SCH	2.3%	2.7%	9.6%	21.0%	20.2%	-0.8%	17.9%
USM¹	Early College SCH	2,282	1,921	2,349	2,453	2,167	-11.6%	-5.0%
	Undergraduate SCH	76,111	70,682	66,053	66,603	68,697	3.1%	-9.7%
	Early College as % of UG SCH	3.0%	2.7%	3.6%	3.7%	3.2%	-0.5%	0.2%
Total	Early College SCH	4,414	6,078	9,525	12,290	10,925	-11.1%	147.5%
	Undergraduate SCH	300,345	293,765	290,839	293,277	291,375	-0.6%	-3.0%
	Early College as % of UG SCH	1.5%	2.1%	3.3%	4.2%	3.7%	-0.4%	2.3%

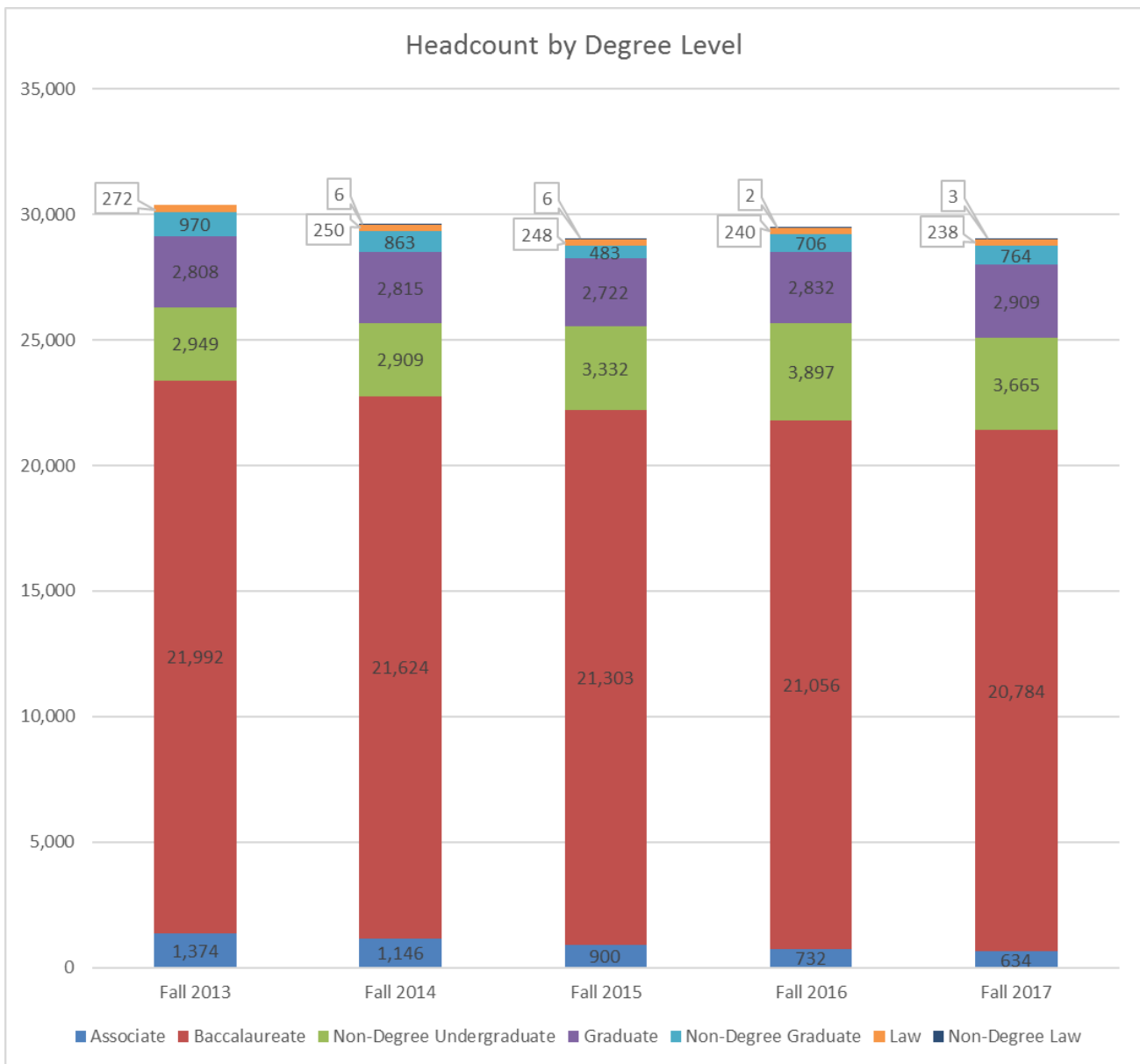
1. For USM, the Fall 2016 Enrollment report did not identify the 16 Bridge Year students and reported an Early College headcount of 539.



Fall 2017 Enrollment Report – The University of Maine System

Headcount by Degree Level

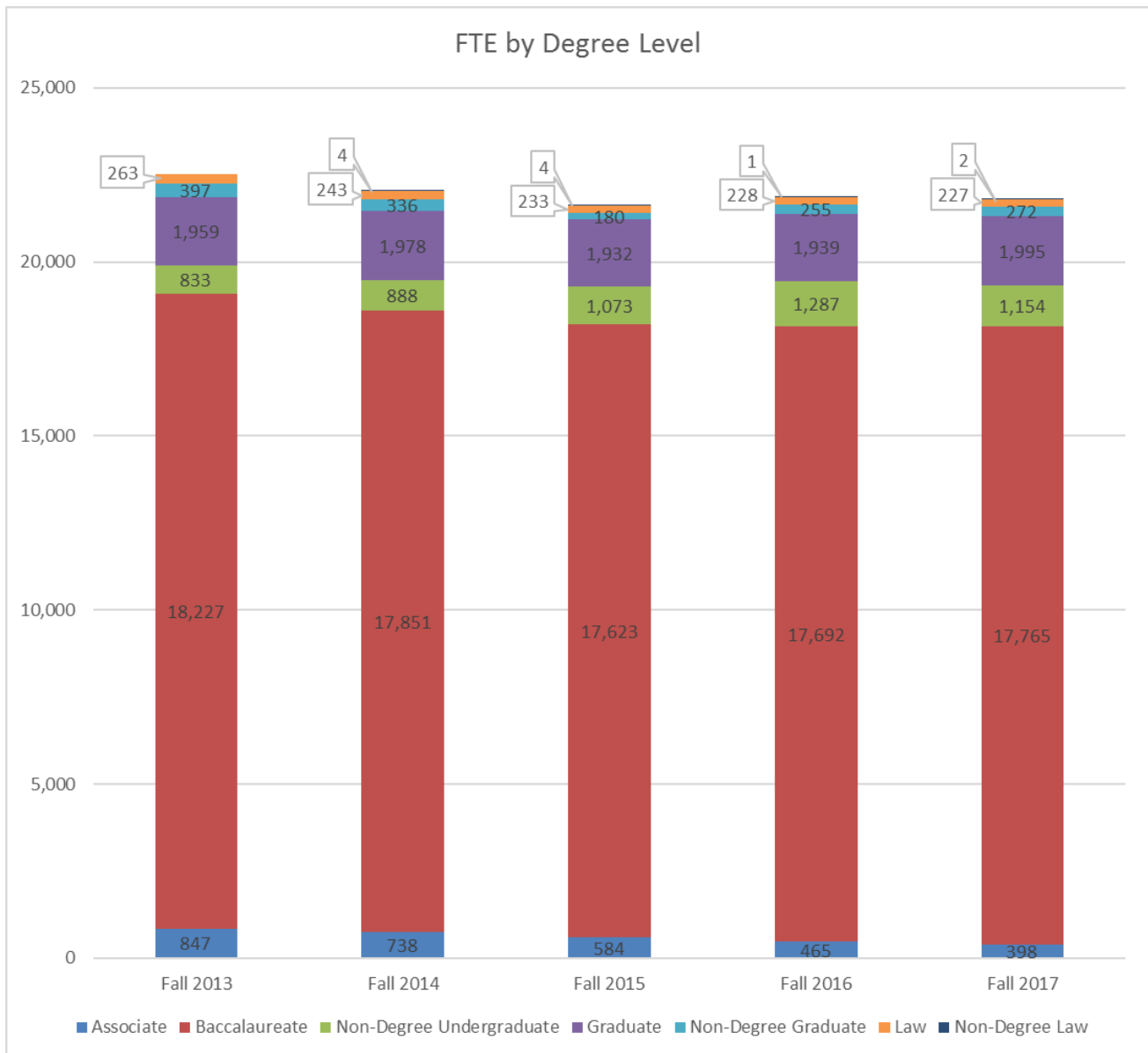
	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	% Change		Trend Line
							1-Year	5-year	
Associate	1,374	1,146	900	732	634	2.2%	-13.4%	-53.9%	
Baccalaureate	21,992	21,624	21,303	21,056	20,784	71.7%	-1.3%	-5.5%	
Non-Degree Undergraduate	2,949	2,909	3,332	3,897	3,665	12.6%	-6.0%	24.3%	
Graduate	2,808	2,815	2,722	2,832	2,909	10.0%	2.7%	3.6%	
Non-Degree Graduate	970	863	483	706	764	2.6%	8.2%	-21.2%	
Law	272	250	248	240	238	0.8%	-0.8%	-12.5%	
Non-Degree Law	0	6	6	2	3	0.0%	50.0%	0.0%	
Total	30,365	29,613	28,994	29,465	28,997	100.0%	-1.6%	-4.5%	



Fall 2017 Enrollment Report – The University of Maine System

FTE by Degree Level

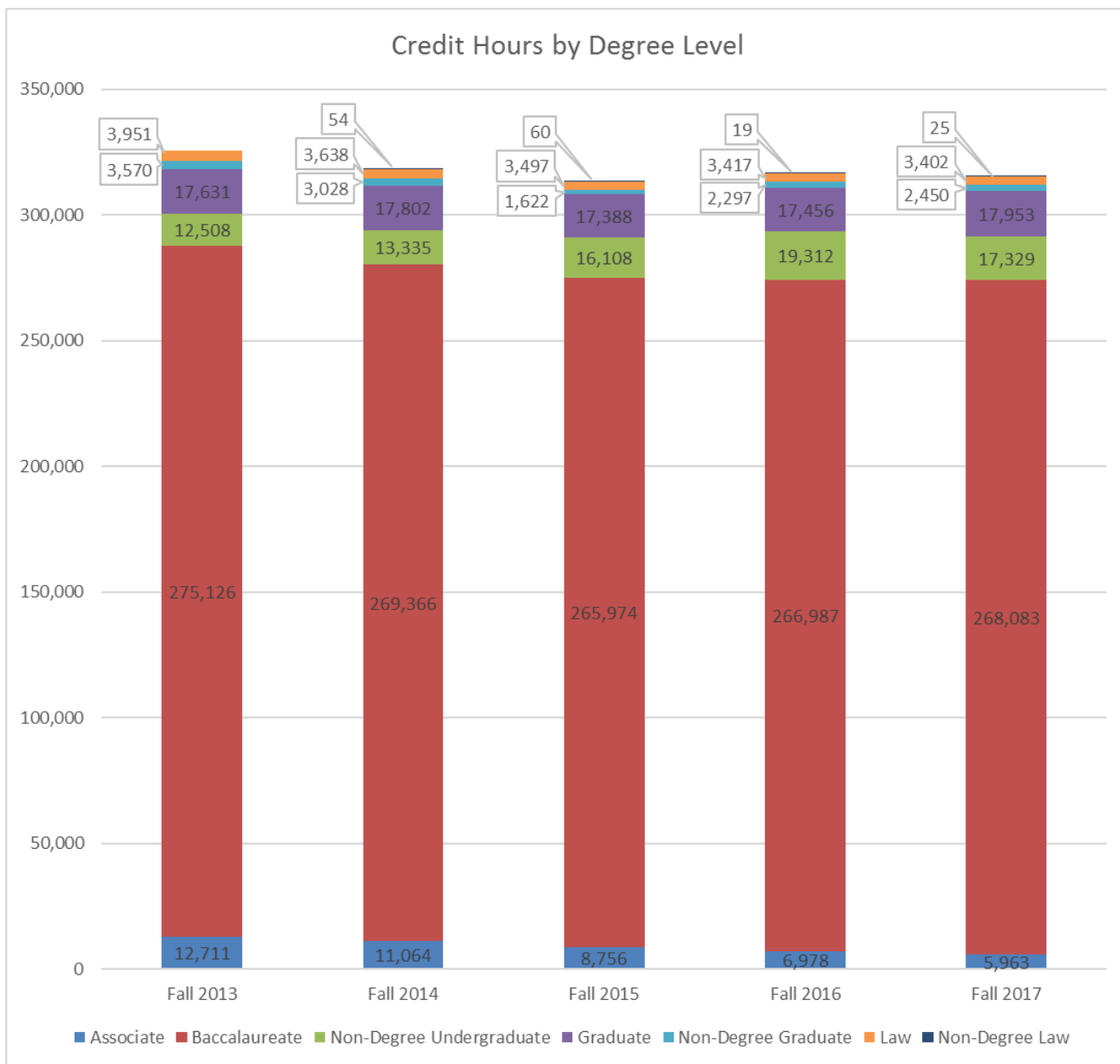
	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	% Change		Trend Line
							1-Year	5-year	
Associate	847	738	584	465	398	1.8%	-14.5%	-53.1%	
Baccalaureate	18,227	17,851	17,623	17,692	17,765	81.4%	0.4%	-2.5%	
Non-Degree Undergraduate	833	888	1,073	1,287	1,154	5.3%	-10.3%	38.6%	
Graduate	1,959	1,978	1,932	1,939	1,995	9.1%	2.9%	1.8%	
Non-Degree Graduate	397	336	180	255	272	1.2%	6.7%	-31.4%	
Law	263	243	233	228	227	1.0%	-0.4%	-13.9%	
Non-Degree Law	0	4	4	1	2	0.0%	31.6%	0.0%	
Total	22,526	22,037	21,629	21,867	21,812	100.0%	-0.3%	-3.2%	



Fall 2017 Enrollment Report – The University of Maine System

Credit Hours by Degree Level

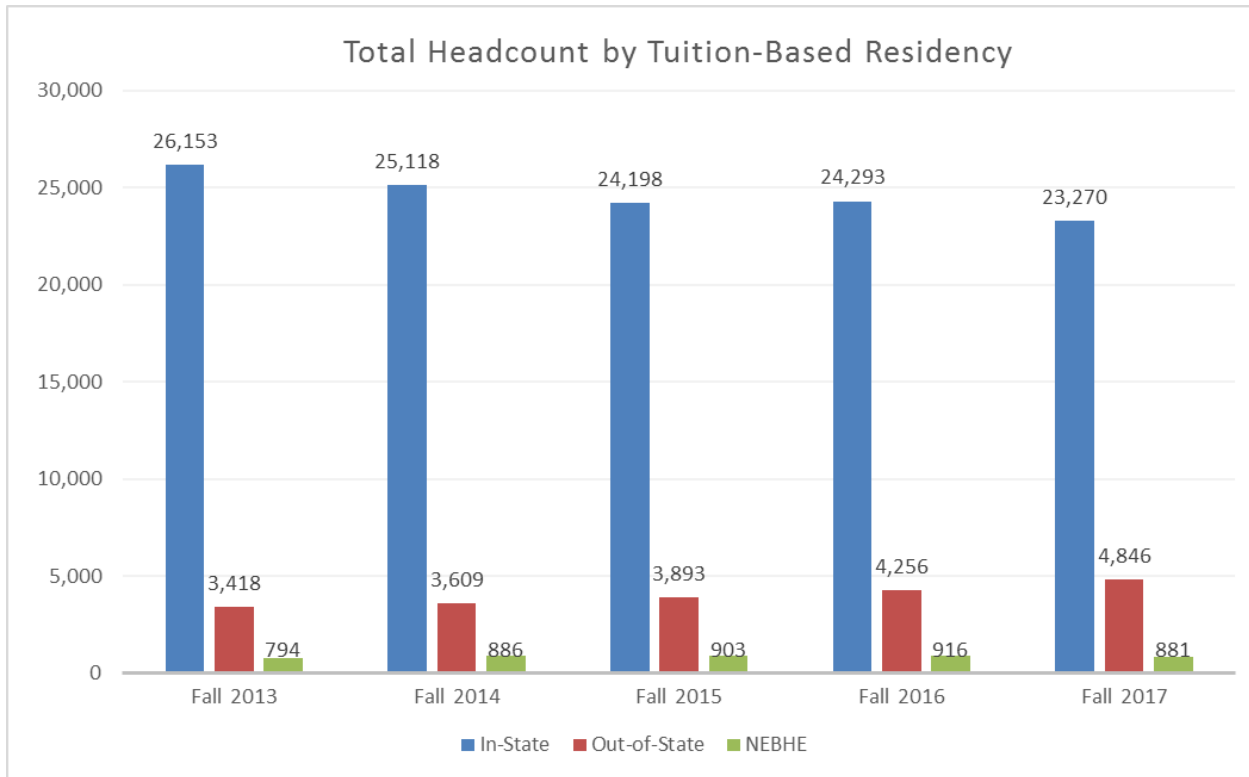
	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	% Change		Trend Line
							1-Year	5-year	
Associate	12,711	11,064	8,756	6,978	5,963	1.9%	-14.5%	-53.1%	
Baccalaureate	275,126	269,366	265,974	266,987	268,083	85.1%	0.4%	-2.6%	
Non-Degree Undergraduate	12,508	13,335	16,108	19,312	17,329	5.5%	-10.3%	38.5%	
Graduate	17,631	17,802	17,388	17,456	17,953	5.7%	2.9%	1.8%	
Non-Degree Graduate	3,570	3,028	1,622	2,297	2,450	0.8%	6.7%	-31.4%	
Law	3,951	3,638	3,497	3,417	3,402	1.1%	-0.4%	-13.9%	
Non-Degree Law	0	54	60	19	25	0.0%	31.6%	N/A	
Total	325,496	318,287	313,405	316,465	315,204	100.0%	-0.4%	-3.2%	



Fall 2017 Enrollment Report – The University of Maine System

Headcount by Student Level and Tuition-Based Residency

		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	% Change		Trend Line
								1-year	5-year	
Undergraduate	In-State	22,778	21,849	21,455	21,243	20,107	80.2%	-5.3%	-11.7%	
	Out-of-State	2,811	3,005	3,230	3,574	4,138	16.5%	15.8%	47.2%	
	NEBHE	726	825	850	868	838	3.3%	-3.5%	15.4%	
	Total	26,315	25,679	25,535	25,685	25,083	100.0%	-2.3%	-4.7%	
Graduate	In-State	3,375	3,269	2,743	3,050	3,163	80.8%	3.7%	-6.3%	
	Out-of-State	607	604	663	682	708	18.1%	3.8%	16.6%	
	NEBHE	68	61	53	48	43	1.1%	-10.4%	-36.8%	
	Total	4,050	3,934	3,459	3,780	3,914	100.0%	3.5%	-3.4%	
Total	In-State	26,153	25,118	24,198	24,293	23,270	80.2%	-4.2%	-11.0%	
	Out-of-State	3,418	3,609	3,893	4,256	4,846	16.7%	13.9%	41.8%	
	NEBHE	794	886	903	916	881	3.0%	-3.8%	11.0%	
	Total	30,365	29,613	28,994	29,465	28,997	100.0%	-1.6%	-4.5%	



Notes:

1. The following table shows student residency based on the tuition rate.
2. Students enrolled under the New England Regional Student Program (NEBHE) pay 150% of in-state tuition, which may include out-of-state students and Canadian students.
3. Students with a tuition residency of Online are included with the out-of-state category.

Fall 2017 Enrollment Report – The University of Maine System

		Headcount by Campus and Tuition-Based Residency					% of Total	% Change		Trend Line
		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017		1-year	5-year	
UM	In-state	8,700	8,368	7,779	7,798	7,420	66.0%	-4.8%	-14.7%	
	Out-of-state	2,079	2,349	2,546	2,791	3,205	28.5%	14.8%	54.2%	
	NEBHE	468	569	597	630	615	5.5%	-2.4%	31.4%	
	Total	11,247	11,286	10,922	11,219	11,240	100.0%	0.2%	-0.1%	
UMA	In-state	4,610	4,513	4,497	4,262	3,849	95.9%	-9.7%	-16.5%	
	Out-of-state	142	139	170	142	145	3.6%	2.1%	2.1%	
	NEBHE	18	12	16	12	20	0.5%	66.7%	11.1%	
	Total	4,770	4,664	4,683	4,416	4,014	100.0%	-9.1%	-15.8%	
UMF	In-state	1,761	1,674	1,722	1,704	1,782	85.7%	4.6%	1.2%	
	Out-of-state	225	207	208	195	202	9.7%	3.6%	-10.2%	
	NEBHE	75	79	86	101	96	4.6%	-5.0%	28.0%	
	Total	2,061	1,960	2,016	2,000	2,080	100.0%	4.0%	0.9%	
UMFK	In-state	1,095	1,191	1,404	1,708	1,566	89.0%	-8.3%	43.0%	
	Out-of-state	83	108	127	183	185	10.5%	1.1%	122.9%	
	NEBHE	31	28	28	13	9	0.5%	-30.8%	-71.0%	
	Total	1,209	1,327	1,559	1,904	1,760	100.0%	-7.6%	45.6%	
UMM	In-state	771	701	683	633	618	88.2%	-2.4%	-19.8%	
	Out-of-state	98	87	78	87	60	8.6%	-31.0%	-38.8%	
	NEBHE	23	22	25	25	23	3.3%	-8.0%	0.0%	
	Total	892	810	786	745	701	100.0%	-5.9%	-21.4%	
UMPI	In-state	1,146	1,022	1,165	1,193	1,252	88.9%	4.9%	9.2%	
	Out-of-state	43	53	71	97	128	9.1%	32.0%	197.7%	
	NEBHE	74	63	53	36	28	2.0%	-22.2%	-62.2%	
	Total	1,263	1,138	1,289	1,326	1,408	100.0%	6.2%	11.5%	
USM	In-state	8,070	7,649	6,948	6,995	6,783	87.0%	-3.0%	-15.9%	
	Out-of-state	748	666	693	761	921	11.8%	21.0%	23.1%	
	NEBHE	105	113	98	99	90	1.2%	-9.1%	-14.3%	
	Total	8,923	8,428	7,739	7,855	7,794	100.0%	-0.8%	-12.7%	
Total	In-state	26,153	25,118	24,198	24,293	23,270	80.2%	-4.2%	-11.0%	
	Out-of-state	3,418	3,609	3,893	4,256	4,846	16.7%	13.9%	41.8%	
	NEBHE	794	886	903	916	881	3.0%	-3.8%	11.0%	
	Total	30,365	29,613	28,994	29,465	28,997	100.0%	-1.6%	-4.5%	

Notes:

1. The following table shows student residency based on the student's tuition rate.
2. Students enrolled under the New England Regional Student Program (NEBHE) pay 150% of in-state tuition, which may include out-of-state students and Canadian students.
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Fall 2017 Enrollment Report – The University of Maine System

Credit Hours by Campus and Tuition-Based Residency










		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	% Change		Trend Line
								1-year	5-year	
UM	In-state	101,916	98,588	94,387	93,004	88,522	63.6%	-4.8%	-13.1%	
	Out-of-state	24,856	29,358	31,748	35,547	41,957	30.1%	18.0%	68.8%	
	NEBHE	6,538	8,020	8,474	8,953	8,808	6.3%	-1.6%	34.7%	
	Total	133,310	135,965	134,609	137,504	139,287	100.0%	1.3%	4.5%	
UMA	In-state	39,358	37,897	37,825	35,057	31,111	95.6%	-11.3%	-21.0%	
	Out-of-state	1,195	1,217	1,454	1,199	1,256	3.9%	4.8%	5.1%	
	NEBHE	137	105	111	76	164	0.5%	115.8%	19.7%	
	Total	40,690	39,219	39,390	36,332	32,531	100.0%	-10.5%	-20.1%	
UMF	In-state	23,987	22,266	22,584	22,302	22,371	83.2%	0.3%	-6.7%	
	Out-of-state	3,339	3,098	3,112	2,898	3,043	11.3%	5.0%	-8.9%	
	NEBHE	1,157	1,260	1,338	1,555	1,490	5.5%	-4.2%	28.8%	
	Total	28,483	26,624	27,034	26,755	26,904	100.0%	0.6%	-5.5%	
UMFK	In-state	10,562	10,662	11,438	13,083	11,723	82.2%	-10.4%	11.0%	
	Out-of-state	1,086	1,506	1,836	2,504	2,429	17.0%	-3.0%	123.7%	
	NEBHE	433	397	384	193	104	0.7%	-46.1%	-76.0%	
	Total	12,081	12,565	13,658	15,780	14,256	100.0%	-9.7%	18.0%	
UMM	In-state	6,548	6,281	6,068	5,888	5,740	84.6%	-2.5%	-12.3%	
	Out-of-state	1,272	1,162	971	1,155	809	11.9%	-30.0%	-36.4%	
	NEBHE	311	293	355	341	236	3.5%	-30.8%	-24.0%	
	Total	8,131	7,736	7,394	7,384	6,785	100.0%	-8.1%	-16.6%	
UMPI	In-state	11,099	10,207	10,731	11,576	11,441	84.5%	-1.2%	3.1%	
	Out-of-state	552	646	940	1,238	1,731	12.8%	39.8%	213.6%	
	NEBHE	987	832	680	461	371	2.7%	-19.5%	-62.4%	
	Total	12,638	11,685	12,351	13,275	13,543	100.0%	2.0%	7.2%	
USM	In-state	79,702	74,949	69,204	68,437	68,990	84.2%	0.8%	-13.4%	
	Out-of-state	9,085	8,088	8,525	9,679	11,722	14.3%	21.1%	29.0%	
	NEBHE	1,378	1,456	1,241	1,319	1,187	1.4%	-10.0%	-13.8%	
	Total	90,164	84,493	78,970	79,435	81,899	100.0%	3.1%	-9.2%	
Total	In-state	273,172	260,849	252,236	249,347	239,897	76.1%	-3.8%	-12.2%	
	Out-of-state	41,384	45,075	48,585	54,220	62,947	20.0%	16.1%	52.1%	
	NEBHE	10,940	12,363	12,583	12,898	12,360	3.9%	-4.2%	13.0%	
	Total	325,496	318,287	313,405	316,465	315,204	100.0%	-0.4%	-3.2%	

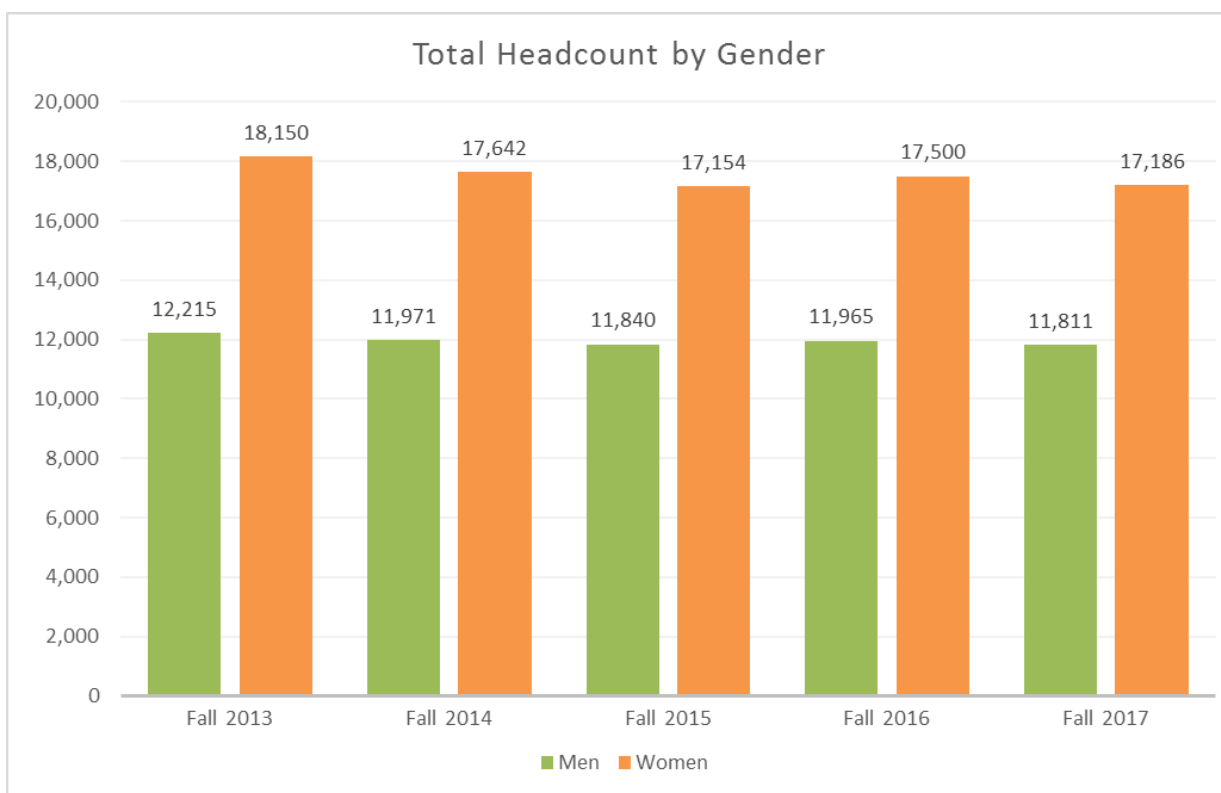
Notes:

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3. Students with a tuition residency of Online are included with the out-of-state category.

Fall 2017 Enrollment Report – The University of Maine System

Headcount by Student Level and Gender

		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	% Change		Trend Line
								1-year	5-year	
Undergraduate	Men	10,893	10,713	10,646	10,736	10,589	42.2%	-1.4%	-2.8%	
	Women	15,422	14,966	14,889	14,949	14,494	57.8%	-3.0%	-6.0%	
	Total	26,315	25,679	25,535	25,685	25,083	100.0%	-2.3%	-4.7%	
Graduate	Men	1,322	1,258	1,194	1,229	1,222	31.2%	-0.6%	-7.6%	
	Women	2,728	2,676	2,265	2,551	2,692	68.8%	5.5%	-1.3%	
	Total	4,050	3,934	3,459	3,780	3,914	100.0%	3.5%	-3.4%	
Total	Men	12,215	11,971	11,840	11,965	11,811	40.7%	-1.3%	-3.3%	
	Women	18,150	17,642	17,154	17,500	17,186	59.3%	-1.8%	-5.3%	
	Total	30,365	29,613	28,994	29,465	28,997	100.0%	-1.6%	-4.5%	



Note: Gender assigned proportionally by campus starting in Fall 2016 for any unknowns represented in the source data.

Fall 2017 Enrollment Report – The University of Maine System

Headcount by Campus by Gender

		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	% Change		Trend Line
								1-year	5-year	
UM	Men	5,467	5,518	5,497	5,619	5,563	49.5%	-1.0%	1.8%	
	Women	5,780	5,768	5,425	5,600	5,677	50.5%	1.4%	-1.8%	
	Total	11,247	11,286	10,922	11,219	11,240	100.0%	0.2%	-0.1%	
UMA	Men	1,365	1,299	1,293	1,242	1,183	29.5%	-4.8%	-13.3%	
	Women	3,405	3,365	3,390	3,174	2,831	70.5%	-10.8%	-16.9%	
	Total	4,770	4,664	4,683	4,416	4,014	100.0%	-9.1%	-15.8%	
UMF	Men	672	647	657	650	657	31.6%	1.1%	-2.2%	
	Women	1,389	1,313	1,359	1,350	1,423	68.4%	5.4%	2.4%	
	Total	2,061	1,960	2,016	2,000	2,080	100.0%	4.0%	0.9%	
UMFK	Men	351	411	473	586	486	27.6%	-17.1%	38.5%	
	Women	858	916	1,086	1,318	1,274	72.4%	-3.3%	48.5%	
	Total	1,209	1,327	1,559	1,904	1,760	100.0%	-7.6%	45.6%	
UMM	Men	268	263	258	233	217	31.0%	-6.9%	-19.0%	
	Women	624	547	528	512	484	69.0%	-5.5%	-22.4%	
	Total	892	810	786	745	701	100.0%	-5.9%	-21.4%	
UMPI	Men	463	407	461	503	538	38.2%	7.0%	16.2%	
	Women	800	731	828	823	870	61.8%	5.7%	8.8%	
	Total	1,263	1,138	1,289	1,326	1,408	100.0%	6.2%	11.5%	
USM	Men	3,629	3,426	3,201	3,126	3,115	40.0%	-0.4%	-14.2%	
	Women	5,294	5,002	4,538	4,729	4,679	60.0%	-1.1%	-11.6%	
	Total	8,923	8,428	7,739	7,855	7,794	100.0%	-0.8%	-12.7%	
Total	Men	12,215	11,971	11,840	11,959	11,759	40.6%	-1.7%	-3.7%	
	Women	18,150	17,642	17,154	17,506	17,238	59.4%	-1.5%	-5.0%	
	Total	30,365	29,613	28,994	29,465	28,997	100.0%	-1.6%	-4.5%	

Note: Gender assigned proportionally by campus as of Fall 2016 for any unknowns represented in the source data.

Fall 2017 Enrollment Report – The University of Maine System

Credit Hours by Campus by Gender

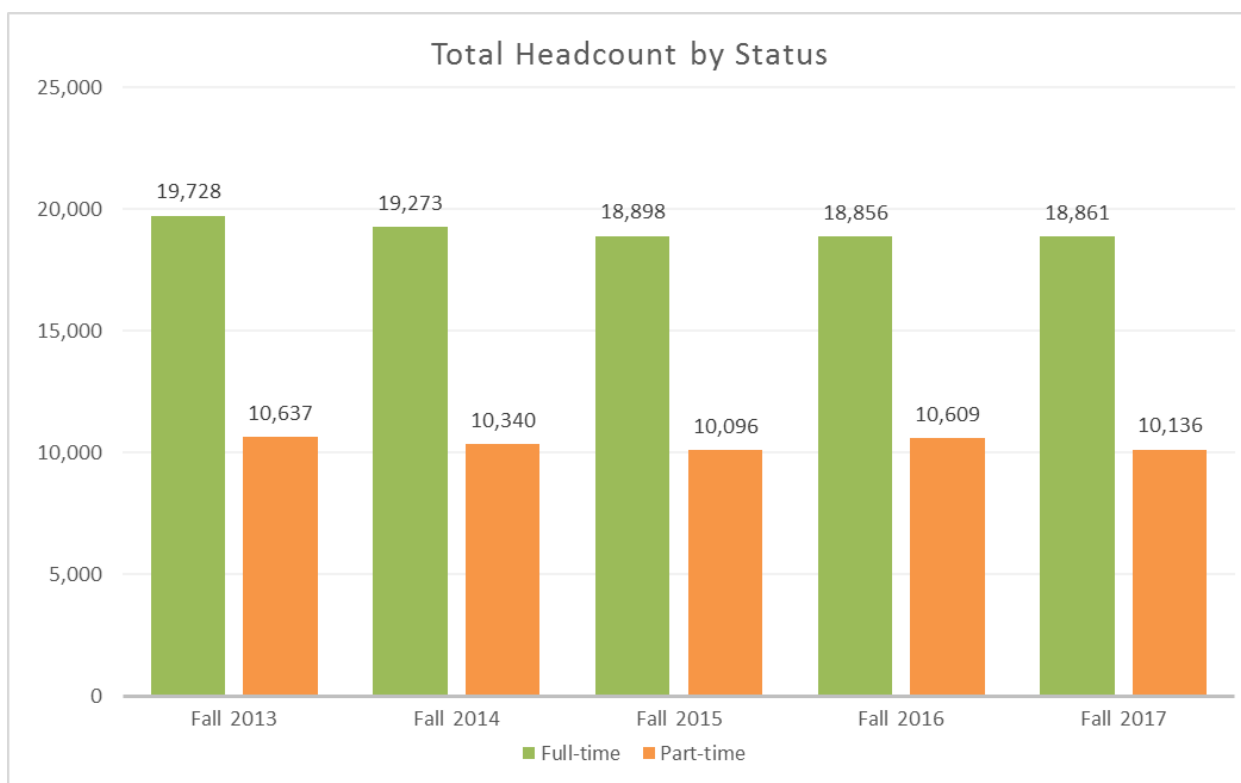
		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	% Change		Trend Line
								1-year	5-year	
UM	Men	68,272	70,083	70,115	71,716	72,235	51.9%	0.7%	5.8%	
	Women	65,038	65,882	64,494	65,788	67,052	48.1%	1.9%	3.1%	
	Total	133,310	135,965	134,609	137,504	139,287	100.0%	1.3%	4.5%	
UMA	Men	12,243	11,266	11,062	10,440	9,745	30.0%	-6.7%	-20.4%	
	Women	28,447	27,953	28,328	25,892	22,786	70.0%	-12.0%	-19.9%	
	Total	40,690	39,219	39,390	36,332	32,531	100.0%	-10.5%	-20.1%	
UMF	Men	9,562	9,081	9,173	8,989	8,857	32.9%	-1.5%	-7.4%	
	Women	18,921	17,543	17,861	17,766	18,047	67.1%	1.6%	-4.6%	
	Total	28,483	26,624	27,034	26,755	26,904	100.0%	0.6%	-5.5%	
UMFK	Men	3,752	4,045	4,394	4,951	4,284	30.1%	-13.5%	14.2%	
	Women	8,329	8,520	9,264	10,829	9,972	69.9%	-7.9%	19.7%	
	Total	12,081	12,565	13,658	15,780	14,256	100.0%	-9.7%	18.0%	
UMM	Men	2,775	2,663	2,543	2,509	2,307	34.0%	-8.1%	-16.8%	
	Women	5,356	5,073	4,851	4,875	4,478	66.0%	-8.1%	-16.4%	
	Total	8,131	7,736	7,394	7,384	6,785	100.0%	-8.1%	-16.6%	
UMPI	Men	5,013	4,558	4,671	5,171	5,397	39.9%	4.4%	7.7%	
	Women	7,625	7,127	7,680	8,104	8,146	60.1%	0.5%	6.8%	
	Total	12,638	11,685	12,351	13,275	13,543	100.0%	2.0%	7.2%	
USM	Men	37,711	35,207	33,110	32,369	33,177	40.5%	2.5%	-12.0%	
	Women	52,453	49,286	45,860	47,066	48,721	59.5%	3.5%	-7.1%	
	Total	90,164	84,493	78,970	79,435	81,899	100.0%	3.1%	-9.2%	
Total	Men	139,327	136,903	135,067	136,145	136,002	43.1%	-0.1%	-2.4%	
	Women	186,169	181,384	178,338	180,319	179,202	56.9%	-0.6%	-3.7%	
	Total	325,496	318,287	313,405	316,465	315,204	100.0%	-0.4%	-3.2%	

Note: Gender assigned proportionally by campus as of Fall 2016 for any unknowns represented in the source data.

Fall 2017 Enrollment Report – The University of Maine System

Headcount by Student Level and Status

		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	% Change		Trend Line
								1-year	5-year	
Undergraduate	Full-time	17,463	17,084	16,868	16,786	16,754	66.8%	-0.2%	-4.1%	
	Part-time	8,852	8,595	8,667	8,899	8,329	33.2%	-6.4%	-5.9%	
	Total	26,315	25,679	25,535	25,685	25,083	100.0%	-2.3%	-4.7%	
Graduate	Full-time	2,265	2,189	2,030	2,070	2,107	53.8%	1.8%	-7.0%	
	Part-time	1,785	1,745	1,429	1,710	1,807	46.2%	5.7%	1.2%	
	Total	4,050	3,934	3,459	3,780	3,914	100.0%	3.5%	-3.4%	
Total	Full-time	19,728	19,273	18,898	18,856	18,861	65.0%	0.0%	-4.4%	
	Part-time	10,637	10,340	10,096	10,609	10,136	35.0%	-4.5%	-4.7%	
	Total	30,365	29,613	28,994	29,465	28,997	100.0%	-1.6%	-4.5%	



Fall 2017 Enrollment Report – The University of Maine System

Headcount by Campus and Status

		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	% Change		Trend Line
								1-year	5-year	
UM	Full-time	8,987	9,108	9,055	9,090	9,159	81.5%	0.8%	1.9%	
	Part-time	2,260	2,178	1,867	2,129	2,081	18.5%	-2.3%	-7.9%	
	Total	11,247	11,286	10,922	11,219	11,240	100.0%	0.2%	-0.1%	
UMA	Full-time	1,726	1,641	1,663	1,436	1,317	32.8%	-8.3%	-23.7%	
	Part-time	3,044	3,023	3,020	2,980	2,697	67.2%	-9.5%	-11.4%	
	Total	4,770	4,664	4,683	4,416	4,014	100.0%	-9.1%	-15.8%	
UMF	Full-time	1,795	1,684	1,705	1,693	1,690	81.3%	-0.2%	-5.8%	
	Part-time	266	276	311	307	390	18.8%	27.0%	46.6%	
	Total	2,061	1,960	2,016	2,000	2,080	100.0%	4.0%	0.9%	
UMFK	Full-time	594	578	583	668	582	33.1%	-12.9%	-2.0%	
	Part-time	615	749	976	1,236	1,178	66.9%	-4.7%	91.5%	
	Total	1,209	1,327	1,559	1,904	1,760	100.0%	-7.6%	45.6%	
UMM	Full-time	439	434	409	420	367	52.4%	-12.6%	-16.4%	
	Part-time	453	376	377	325	334	47.6%	2.8%	-26.3%	
	Total	892	810	786	745	701	100.0%	-5.9%	-21.4%	
UMPI	Full-time	718	659	675	725	710	50.4%	-2.1%	-1.1%	
	Part-time	545	479	614	601	698	49.6%	16.1%	28.1%	
	Total	1,263	1,138	1,289	1,326	1,408	100.0%	6.2%	11.5%	
USM	Full-time	5,469	5,169	4,808	4,824	5,036	64.6%	4.4%	-7.9%	
	Part-time	3,454	3,259	2,931	3,031	2,758	35.4%	-9.0%	-20.2%	
	Total	8,923	8,428	7,739	7,855	7,794	100.0%	-0.8%	-12.7%	
Total	Full-time	19,728	19,273	18,898	18,856	18,861	65.0%	0.0%	-4.4%	
	Part-time	10,637	10,340	10,096	10,609	10,136	35.0%	-4.5%	-4.7%	
	Total	30,365	29,613	28,994	29,465	28,997	100.0%	-1.6%	-4.5%	

Fall 2017 Enrollment Report – The University of Maine System

Credit Hours by Campus and Status

		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	% Change		Trend Line
								1-year	5-year	
UM	Full-time	123,267	125,917	125,836	128,114	130,083	93.4%	1.5%	5.5%	
	Part-time	10,043	10,049	8,773	9,390	9,204	6.6%	-2.0%	-8.3%	
	Total	133,310	135,965	134,609	137,504	139,287	100.0%	1.3%	4.5%	
UMA	Full-time	21,991	20,968	21,185	18,348	16,994	52.2%	-7.4%	-22.7%	
	Part-time	18,699	18,251	18,205	17,984	15,537	47.8%	-13.6%	-16.9%	
	Total	40,690	39,219	39,390	36,332	32,531	100.0%	-10.5%	-20.1%	
UMF	Full-time	27,244	25,418	25,810	25,406	25,431	94.5%	0.1%	-6.7%	
	Part-time	1,239	1,206	1,224	1,349	1,473	5.5%	9.2%	18.9%	
	Total	28,483	26,624	27,034	26,755	26,904	100.0%	0.6%	-5.5%	
UMFK	Full-time	8,851	8,556	8,739	9,754	8,336	58.5%	-14.5%	-5.8%	
	Part-time	3,230	4,009	4,919	6,026	5,920	41.5%	-1.8%	83.3%	
	Total	12,081	12,565	13,658	15,780	14,256	100.0%	-9.7%	18.0%	
UMM	Full-time	6,089	5,979	5,595	5,782	5,103	75.2%	-11.7%	-16.2%	
	Part-time	2,042	1,758	1,799	1,602	1,682	24.8%	5.0%	-17.6%	
	Total	8,131	7,736	7,394	7,384	6,785	100.0%	-8.1%	-16.6%	
UMPI	Full-time	9,982	9,330	9,413	10,248	9,871	72.9%	-3.7%	-1.1%	
	Part-time	2,656	2,355	2,938	3,027	3,672	27.1%	21.3%	38.3%	
	Total	12,638	11,685	12,351	13,275	13,543	100.0%	2.0%	7.2%	
USM	Full-time	71,106	66,631	62,629	63,031	67,233	82.1%	6.7%	-5.4%	
	Part-time	19,058	17,863	16,341	16,404	14,666	17.9%	-10.6%	-23.0%	
	Total	90,164	84,493	78,970	79,435	81,899	100.0%	3.1%	-9.2%	
Total	Full-time	268,530	262,798	259,207	260,683	263,051	83.5%	0.9%	-2.0%	
	Part-time	56,966	55,489	54,198	55,782	52,154	16.5%	-6.5%	-8.4%	
	Total	325,496	318,287	313,405	316,465	315,204	100.0%	-0.4%	-3.2%	

Fall 2017 Enrollment Report – The University of Maine System

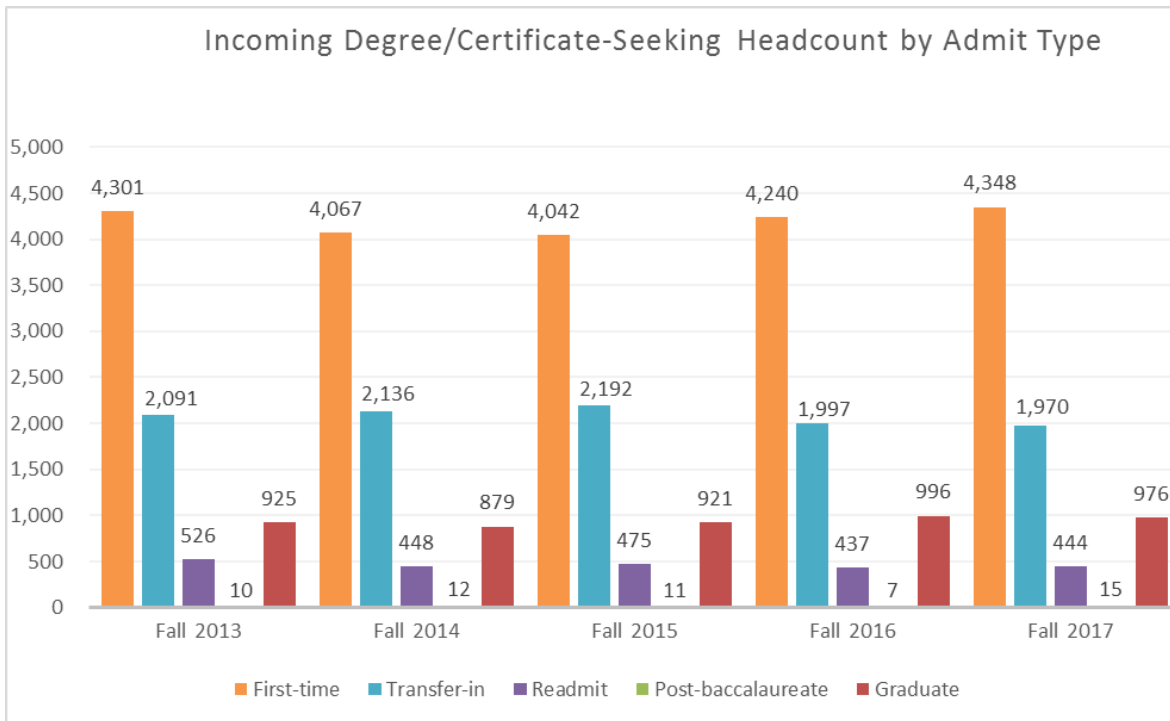
Fall Semester Incoming Degree/Certificate-Seeking Headcount by Admit Type and Campus

	First-time		Transfer-in		Readmit		Post-baccalaureate		Graduate		Total		1-year Change	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	#	%
UM	2,221	2,287	412	394	131	181	0	0	465	446	3,229	3,308	79	2.4%
UMA	307	296	466	430	184	127	0	0	0	0	957	853	(104)	-10.9%
UMF	432	437	94	104	12	16	0	0	18	21	556	578	22	4.0%
UMFK	170	135	200	197	7	12	1	6	0	0	378	350	(28)	-7.4%
UMM	129	99	51	35	24	34	6	9	0	0	210	177	(33)	-15.7%
UMPI	179	171	82	138	16	18	0	0	0	0	277	327	50	18.1%
USM	802	923	692	672	63	56	0	0	513	509	2,070	2,160	90	4.3%
Total	4,240	4,348	1,997	1,970	437	444	7	15	996	976	7,677	7,753	76	1.0%

Notes: First-time is comprised of first-time students in their first-year and students who earned college credit before graduating high school. Graduate includes law students at USM and readmitted graduate students.

Incoming Degree/Certificate-Seeking Headcount by Admit Type

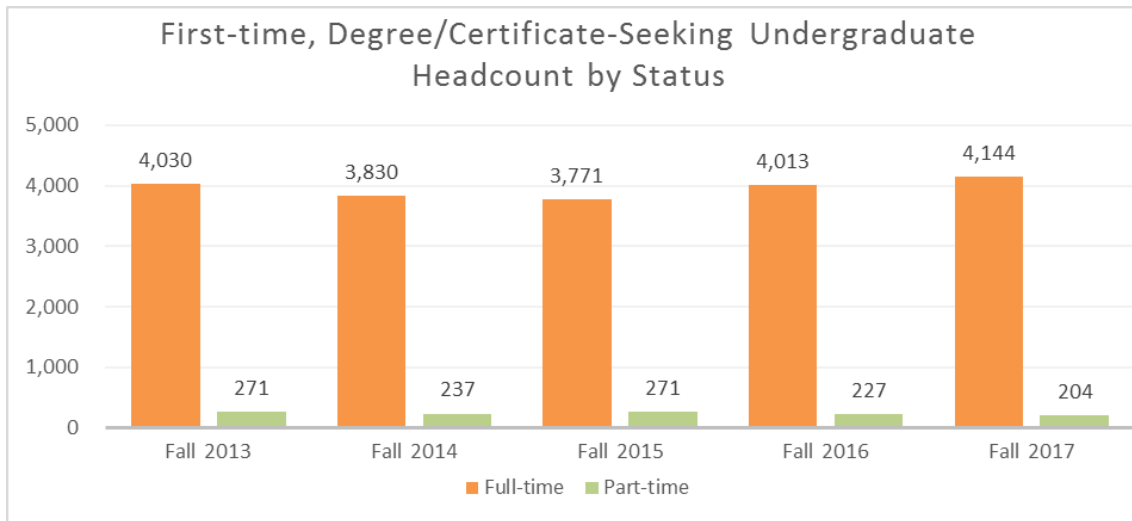
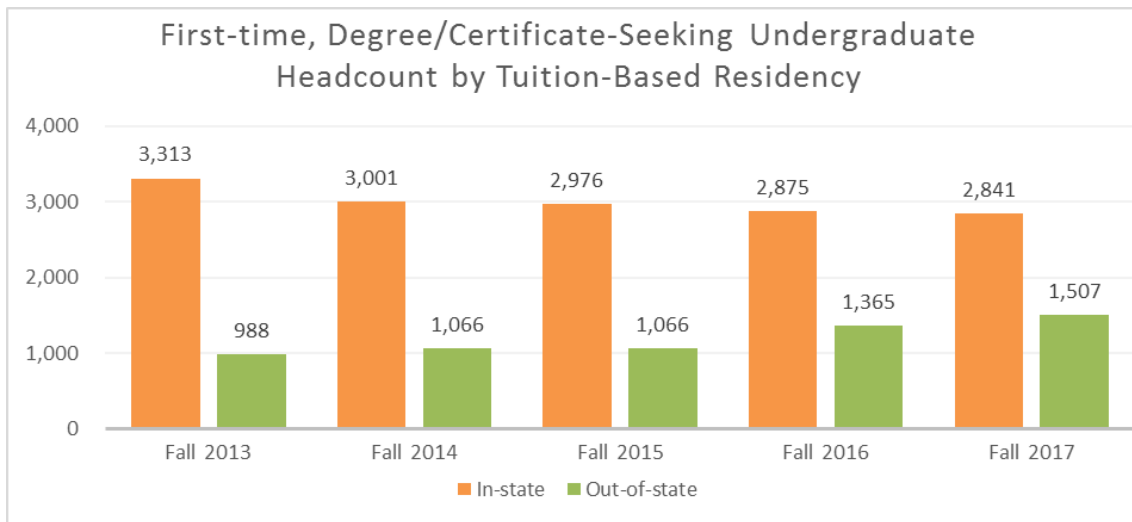
	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	% Change		Trend Line
							1-year	5-year	
First-time	4,301	4,067	4,042	4,240	4,348	56.1%	2.5%	1.1%	
Transfer-in	2,091	2,136	2,192	1,997	1,970	25.4%	-1.4%	-5.8%	
Readmit	526	448	475	437	444	5.7%	1.6%	-15.6%	
Post-baccalaureate	10	12	11	7	15	0.2%	114.3%	50.0%	
Graduate	925	879	921	996	976	12.6%	-2.0%	5.5%	
Total	7,853	7,542	7,641	7,677	7,753	100.0%	1.0%	-1.3%	



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First-time, Degree/Certificate-Seeking Undergraduate Headcount by Tuition-Based Residency and Status

		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% Change		Trend Line
							1-year	5-year	
In-state	Full-time	3,054	2,777	2,727	2,666	2,651	-0.6%	-13.2%	
	Part-time	259	224	249	209	190	-9.1%	-26.6%	
	Total	3,313	3,001	2,976	2,875	2,841	-1.2%	-14.2%	
Out-of-state	Full-time	976	1,053	1,044	1,347	1,493	10.8%	53.0%	
	Part-time	12	13	22	18	14	-22.2%	16.7%	
	Total	988	1,066	1,066	1,365	1,507	10.4%	52.5%	
Total	Full-time	4,030	3,830	3,771	4,013	4,144	3.3%	2.8%	
	Part-time	271	237	271	227	204	-10.1%	-24.7%	
	Total	4,301	4,067	4,042	4,240	4,348	2.5%	1.1%	



Fall 2017 Enrollment Report – The University of Maine System

First-time Headcount by Campus and Tuition-Based Residency

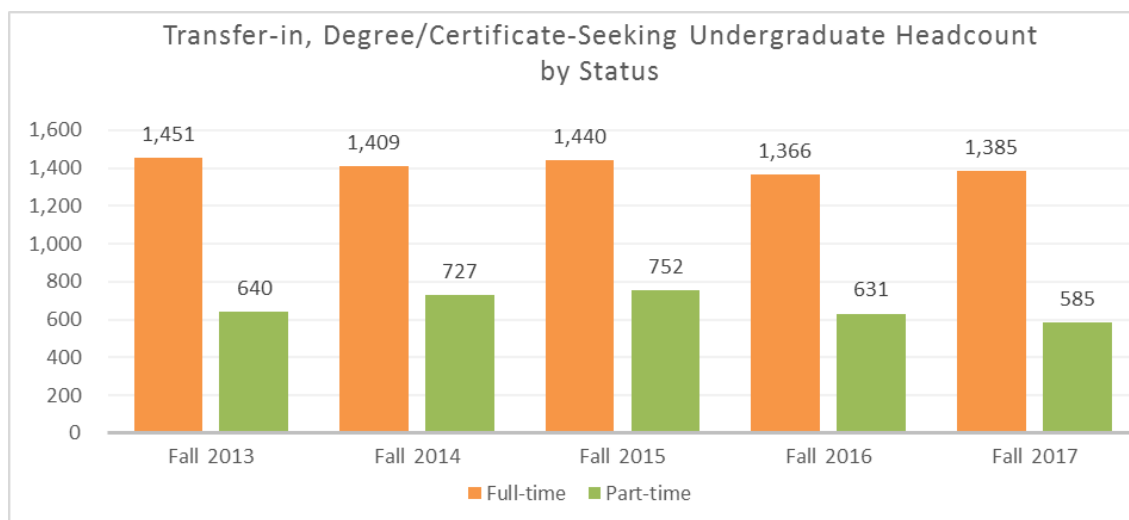
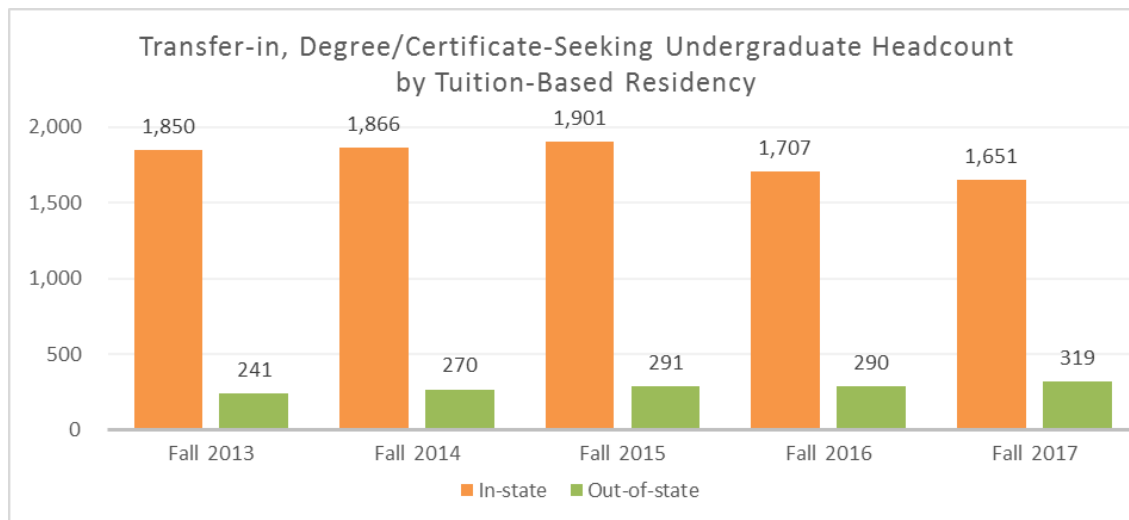
		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	% Change		Trend Line
								1-year	5-year	
UM	In-state	1,485	1,301	1,313	1,253	1,171	51.2%	-6.5%	-21.1%	
	Out-of-state	551	613	576	802	985	43.1%	22.8%	78.8%	
	NEBHE	130	149	147	166	131	5.7%	-21.1%	0.8%	
	Total	2,166	2,063	2,036	2,221	2,287	100.0%	3.0%	5.6%	
UMA	In-state	441	399	395	298	287	97.0%	-3.7%	-34.9%	
	Out-of-state	11	5	8	9	7	2.4%	-22.2%	-36.4%	
	NEBHE	2	1	0	0	2	0.7%	N/A	0.0%	
	Total	454	405	403	307	296	100.0%	-3.6%	-34.8%	
UMF	In-state	357	331	358	351	364	83.3%	3.7%	2.0%	
	Out-of-state	64	54	66	51	54	12.4%	5.9%	-15.6%	
	NEBHE	18	27	24	30	19	4.3%	-36.7%	5.6%	
	Total	439	412	448	432	437	100.0%	1.2%	-0.5%	
UMFK	In-state	136	116	98	124	104	77.0%	-16.1%	-23.5%	
	Out-of-state	20	17	23	46	30	22.2%	-34.8%	50.0%	
	NEBHE	5	3	2	0	1	0.7%	N/A	-80.0%	
	Total	161	136	123	170	135	100.0%	-20.6%	-16.1%	
UMM	In-state	80	99	109	99	87	87.9%	-12.1%	8.8%	
	Out-of-state	16	16	14	26	7	7.1%	-73.1%	-56.3%	
	NEBHE	8	3	8	4	5	5.1%	25.0%	-37.5%	
	Total	104	118	131	129	99	100.0%	-23.3%	-4.8%	
UMPI	In-state	180	181	158	150	123	71.9%	-18.0%	-31.7%	
	Out-of-state	11	13	29	27	46	26.9%	70.4%	318.2%	
	NEBHE	6	3	8	2	2	1.2%	0.0%	-66.7%	
	Total	197	197	195	179	171	100.0%	-4.5%	-13.2%	
USM	In-state	634	574	545	600	705	76.4%	17.5%	11.2%	
	Out-of-state	130	134	147	179	206	22.3%	15.1%	58.5%	
	NEBHE	16	28	14	23	12	1.3%	-47.8%	-25.0%	
	Total	780	736	706	802	923	100.0%	15.1%	18.3%	
Total	In-state	3,313	3,001	2,976	2,875	2,841	65.3%	-1.2%	-14.2%	
	Out-of-state	803	852	863	1,140	1,335	30.7%	17.1%	66.3%	
	NEBHE	185	214	203	225	172	4.0%	-23.6%	-7.0%	
	Total	4,301	4,067	4,042	4,240	4,348	100.0%	2.5%	1.1%	

Note: NEBHE includes Canadian students. Students with a tuition residency of Online are included with the out-of-state category.

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Transfer-in, Degree/Certificate-Seeking Undergraduate Headcount by Tuition-Based Residency and Status

		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% Change		Trend Line
							1-year	5-year	
In-state	Full-time	1,252	1,186	1,209	1,105	1,109	0.4%	-11.4%	
	Part-time	598	680	692	602	542	-10.0%	-9.4%	
	Total	1,850	1,866	1,901	1,707	1,651	-3.3%	-10.8%	
Out-of-state	Full-time	199	223	231	261	276	5.7%	38.7%	
	Part-time	42	47	60	29	43	48.3%	2.4%	
	Total	241	270	291	290	319	10.0%	32.4%	
Total	Full-time	1,451	1,409	1,440	1,366	1,385	1.4%	-4.5%	
	Part-time	640	727	752	631	585	-7.3%	-8.6%	
	Total	2,091	2,136	2,192	1,997	1,970	-1.4%	-5.8%	

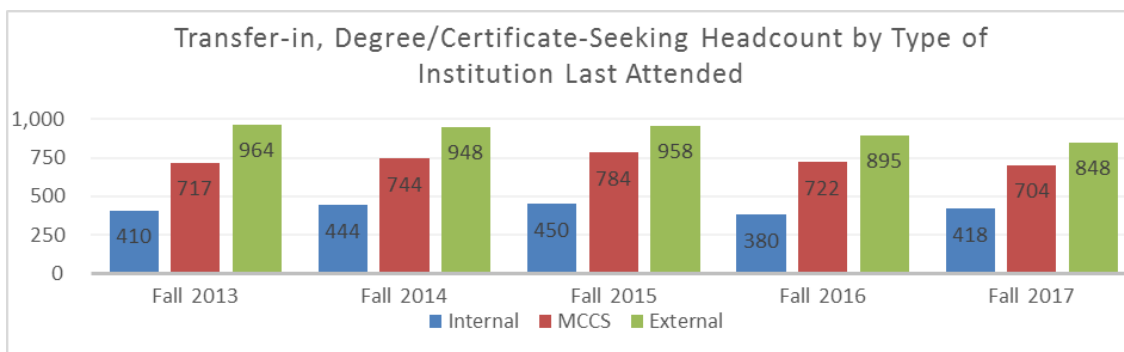


Note: Students with a tuition residency of Online are included with the out-of-state category.

Fall 2017 Enrollment Report – The University of Maine System

Transfer-in, Degree/Certificate-Seeking Undergraduate Headcount by Type of Institution Last Attended and Tuition-Based Residency

		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	1-year Change		Trend Line
							#	%	
Internal (UMS)	In-State	402	437	441	370	409	39	10.5%	
	Out-of-State	8	7	9	10	9	-1	-10.0%	
	Total	410	444	450	380	418	38	10.0%	
Maine Community College System	In-State	709	733	765	709	686	-23	-3.2%	
	Out-of-State	8	11	19	13	18	5	38.5%	
	Total	717	744	784	722	704	-18	-2.5%	
External (excluding MCCS)	In-State	739	696	695	628	556	-72	-11.5%	
	Out-of-State	225	252	263	267	292	25	9.4%	
	Total	964	948	958	895	848	-47	-5.3%	
Total	In-State	1,850	1,866	1,901	1,707	1,651	-56	-3.3%	
	Out-of-State	241	270	291	290	319	29	10.0%	
	Total	2,091	2,136	2,192	1,997	1,970	-27	-1.4%	



Fall 2017 Transfer-in, Degree/Certificate-Seeking Undergraduate Headcount by Type of Institution Last Attended, Tuition-Based Residency, and Campus

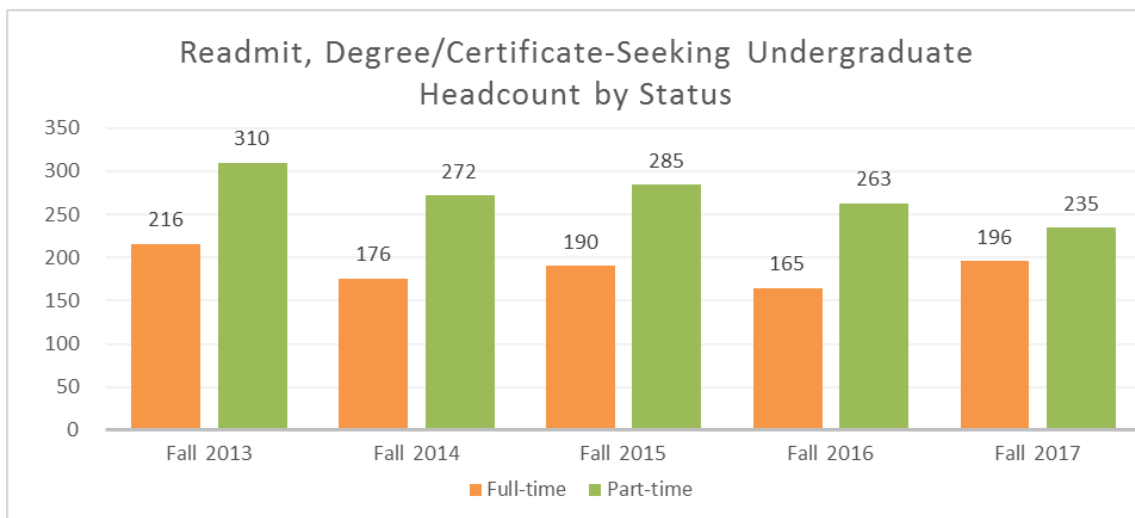
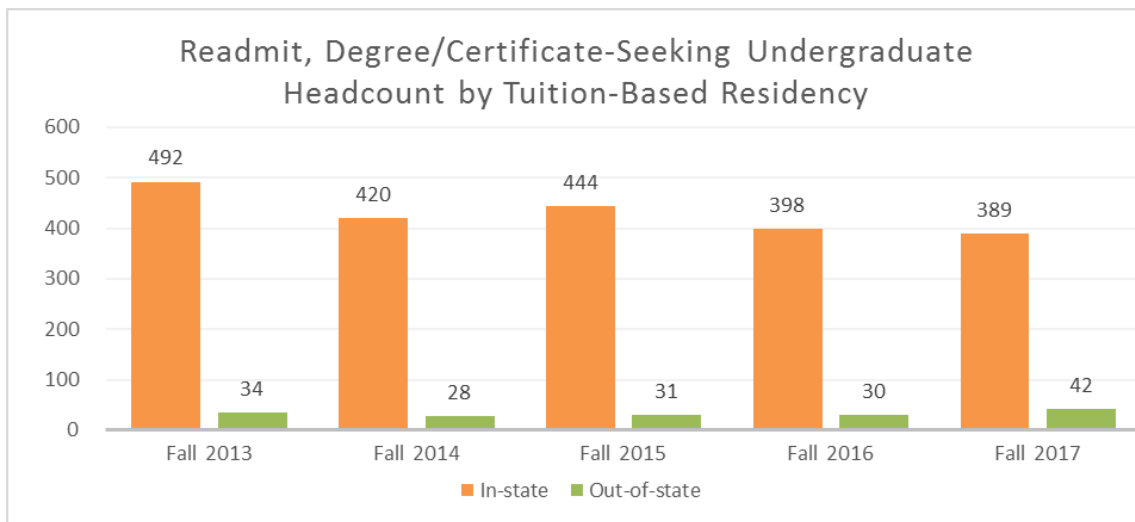
		UM	UMA	UMF	UMFK	UMM	UMPI	USM	Total
Internal (UMS)	In-State	62	110	14	75	9	41	98	409
	Out-of-State	1	1	0	0	2	3	2	9
	Total	63	111	14	75	11	44	100	418
Maine Community College System	In-State	111	149	45	65	13	35	268	686
	Out-of-State	3	5	1	0	1	1	7	18
	Total	114	154	46	65	14	36	275	704
External (excluding MCCS)	In-State	117	127	29	21	7	40	215	556
	Out-of-State	100	38	15	36	3	18	82	292
	Total	217	165	44	57	10	58	297	848
Total	In-State	290	386	88	161	29	116	581	1,651
	Out-of-State	104	44	16	36	6	22	91	319
	Total	394	430	104	197	35	138	672	1,970

Note: Students with a tuition residency of Online are included with the out-of-state category.

Fall 2017 Enrollment Report – The University of Maine System

Readmit, Degree/Certificate-Seeking Undergraduate Headcount by Tuition-Based Residency and Status

		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% Change		Trend Line
							1-year	5-year	
In-state	Full-time	196	158	169	147	168	14.3%	-14.3%	
	Part-time	296	262	275	251	221	-12.0%	-25.3%	
	Total	492	420	444	398	389	-2.3%	-20.9%	
Out-of-state	Full-time	20	18	21	18	28	55.6%	40.0%	
	Part-time	14	10	10	12	14	16.7%	0.0%	
	Total	34	28	31	30	42	40.0%	23.5%	
Total	Full-time	216	176	190	165	196	18.8%	-9.3%	
	Part-time	310	272	285	263	235	-10.6%	-24.2%	
	Total	526	448	475	428	431	0.7%	-18.1%	

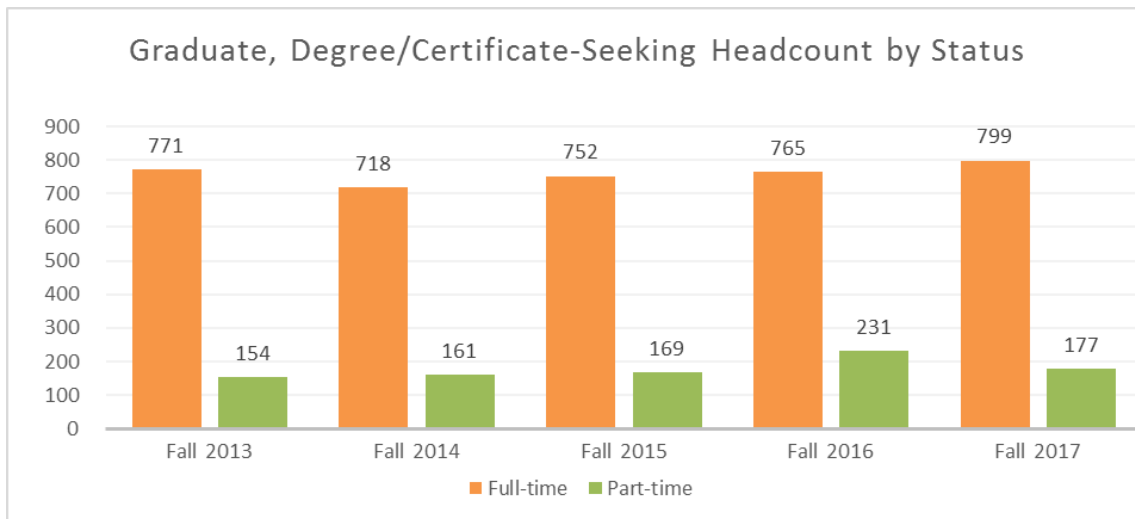
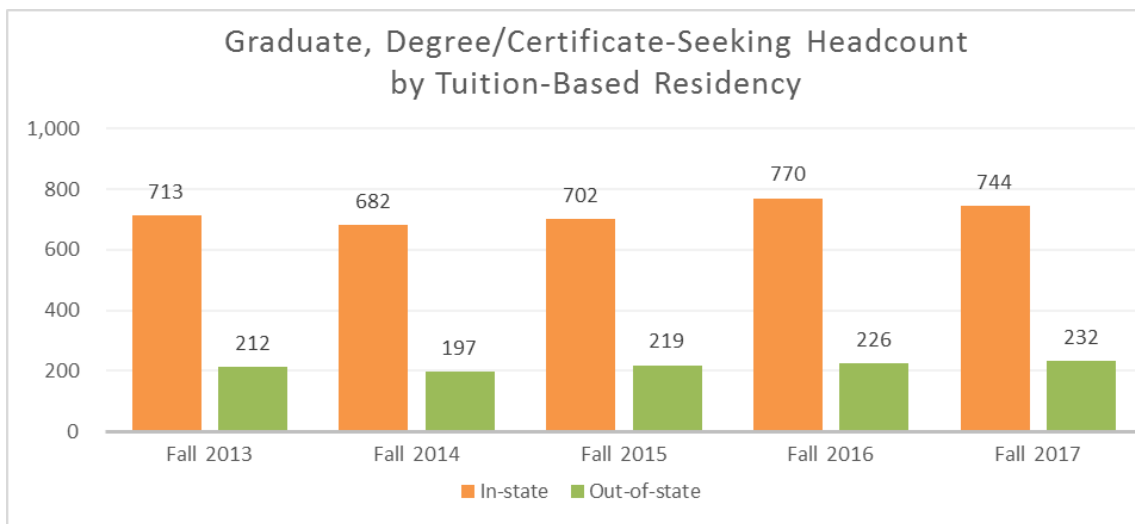


Note: Students with a tuition residency of Online are included with the out-of-state category.

Fall 2017 Enrollment Report – The University of Maine System

Graduate, Degree/Certificate-Seeking Headcount by Tuition-Based Residency and Status

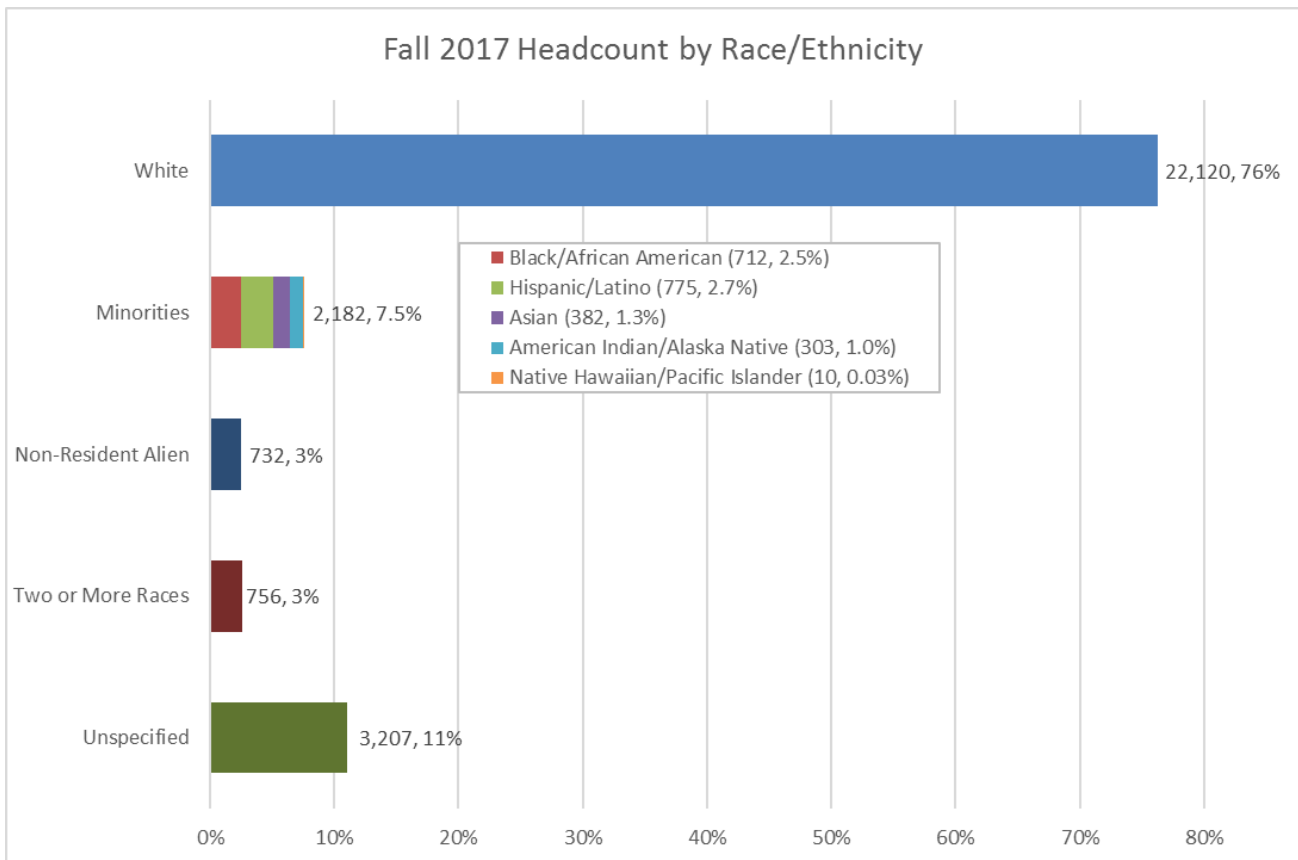
		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% Change		Trend Line
							1-year	5-year	
In-state	Full-time	566	531	543	545	578	6.1%	2.1%	
	Part-time	147	151	159	225	166	-26.2%	12.9%	
	Total	713	682	702	770	744	-3.4%	4.3%	
Out-of-state	Full-time	205	187	209	220	221	0.5%	7.8%	
	Part-time	7	10	10	6	11	83.3%	57.1%	
	Total	212	197	219	226	232	2.7%	9.4%	
Total	Full-time	771	718	752	765	799	4.4%	3.6%	
	Part-time	154	161	169	231	177	-23.4%	14.9%	
	Total	925	879	921	996	976	-2.0%	5.5%	



Notes: Graduate includes law students and readmitted graduate students. Students with a tuition residency of Online are included with the out-of-state category.

Fall 2017 Enrollment Report – The University of Maine System

	Headcount by Race/Ethnicity						1-year Change		5-year Change		Trend Line
	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	#	%	#	%	
	White	23,500	22,729	21,980	22,307	22,120	76.3%	-187	-0.8%	-1,380	
Black/African American	551	581	621	651	712	2.5%	61	9.4%	161	29.2%	
Hispanic / Latino	494	538	598	659	775	2.7%	116	17.6%	281	56.9%	
Asian	356	358	360	392	382	1.3%	-10	-2.6%	26	7.3%	
American Indian / Alaskan	387	368	350	329	303	1.0%	-26	-7.9%	-84	-21.7%	
Hawaii / Pacific Islands	17	15	13	12	10	0.0%	-2	-16.7%	-7	-41.2%	
Non-resident alien	795	864	866	768	732	2.5%	-36	-4.7%	-63	-7.9%	
Two or more races	569	630	656	684	756	2.6%	72	10.5%	187	32.9%	
Unspecified	3,696	3,530	3,550	3,663	3,207	11.1%	-456	-12.4%	-489	-13.2%	
Total	30,365	29,613	28,994	29,465	28,997	100.0%	-468	-1.6%	-1,368	-4.5%	

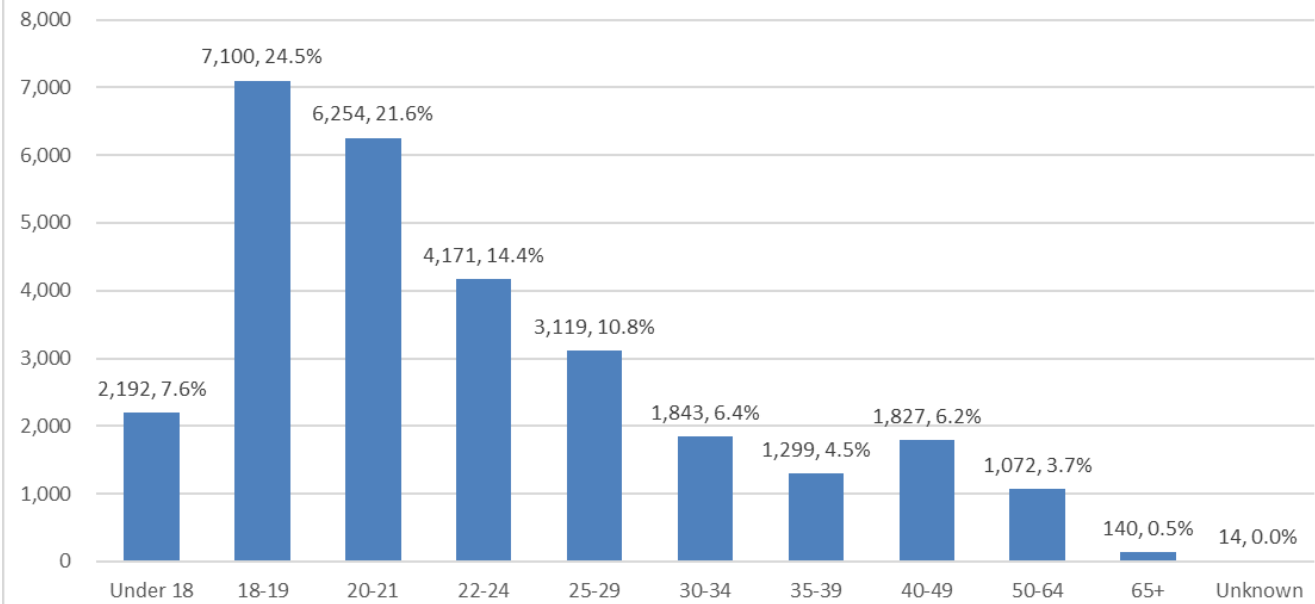


Fall 2017 Enrollment Report – The University of Maine System

Headcount by Age Range

Age Range	Fall 2013		Fall 2014		Fall 2015		Fall 2016		Fall 2017		% Change		Trend Line
	#	% of Total	#	% of Total	#	% of Total	#	% of Total	#	% of Total	1-year	5-year	
Under 18	1,141	3.8%	1,361	4.6%	1,767	6.1%	2,371	8.0%	2,192	7.6%	-7.5%	92.1%	
18-19	6,879	22.7%	6,662	22.5%	6,529	22.5%	6,781	23.0%	7,100	24.5%	4.7%	3.2%	
20-21	6,328	20.8%	6,407	21.6%	6,477	22.3%	6,330	21.5%	6,254	21.6%	-1.2%	-1.2%	
22-24	4,853	16.0%	4,538	15.3%	4,349	15.0%	4,329	14.7%	4,171	14.4%	-3.6%	-14.1%	
25-29	3,573	11.8%	3,426	11.6%	3,339	11.5%	3,281	11.1%	3,119	10.8%	-4.9%	-12.7%	
30-34	2,169	7.1%	2,186	7.4%	1,949	6.7%	1,902	6.5%	1,843	6.4%	-3.1%	-15.0%	
35-39	1,551	5.1%	1,337	4.5%	1,323	4.6%	1,338	4.5%	1,299	4.5%	-2.9%	-16.2%	
40-49	2,249	7.4%	2,167	7.3%	1,957	6.7%	1,827	6.2%	1,793	6.2%	-1.9%	-20.3%	
50-64	1,467	4.8%	1,358	4.6%	1,137	3.9%	1,145	3.9%	1,072	3.7%	-6.4%	-26.9%	
65+	121	0.4%	144	0.5%	154	0.5%	143	0.5%	140	0.5%	-2.1%	15.7%	
Unknown	34	0.1%	27	0.1%	13	0.0%	18	0.1%	14	0.0%	-22.2%	-58.8%	
Total	30,365	100%	29,613	100%	28,994	100%	29,465	100%	28,997	100%	-1.6%	-4.5%	

Fall 2017 Headcount by Age Range



Five-Year Enrollment Change by Summarized Age Ranges

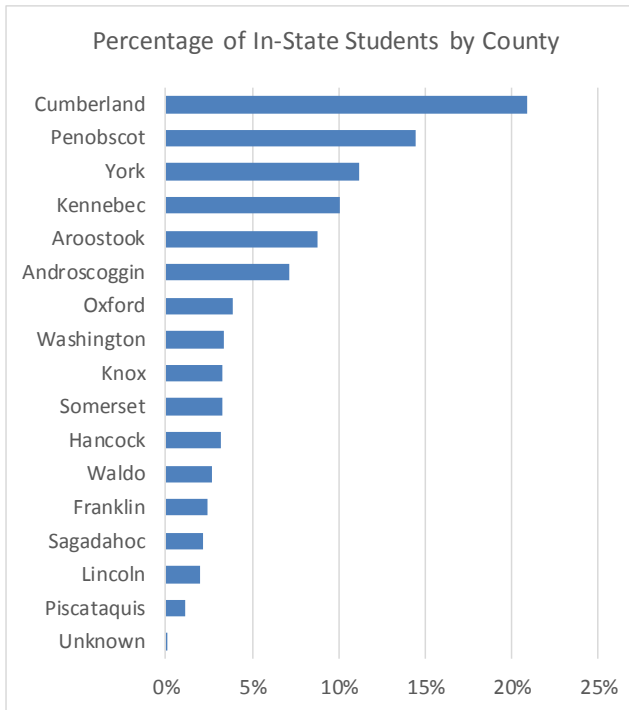
	Under 18	18 - 24	25 - 39	40 - 64	65 and over	Unknown	Total
Fall 2013	1,141	18,060	7,293	3,716	121	34	30,365
Fall 2016	2,371	17,440	6,521	2,972	143	18	29,465
Fall 2017	2,192	17,525	6,261	2,865	140	14	28,997
1-Year	#	-179	85	-260	-107	-3	-468
Change	%	-7.5%	0.5%	-4.0%	-3.6%	-2.1%	-1.6%
5-Year	#	1,051	-535	-1,032	-851	19	-1,368
Change	%	92.1%	-3.0%	-14.2%	-22.9%	15.7%	-4.5%

Fall 2017 Enrollment Report – The University of Maine System

Fall 2017 Headcount Residency (Based on Original Home Address)

Headcount of In-State Students by County

County	Headcount	% of Total In-State
Cumberland	4,734	20.9%
Penobscot	3,272	14.5%
York	2,524	11.2%
Kennebec	2,274	10.0%
Aroostook	1,990	8.8%
Androscoggin	1,608	7.1%
Oxford	885	3.9%
Washington	768	3.4%
Knox	748	3.3%
Somerset	745	3.3%
Hancock	730	3.2%
Waldo	596	2.6%
Franklin	543	2.4%
Sagadahoc	497	2.2%
Lincoln	457	2.0%
Piscataquis	259	1.1%
Unknown	1	0.0%
Total In-State	22,631	100.0%



Headcount of Out-of-State Students by State

State	Headcount	% of Total Out-of-State
Massachusetts	1,910	33.1%
New Hampshire	686	11.9%
Connecticut	628	10.9%
New York	342	5.9%
New Jersey	293	5.1%
Vermont	279	4.8%
California	177	3.1%
Pennsylvania	174	3.0%
Rhode Island	164	2.8%
Florida	123	2.1%
Other States	993	17.2%
Total Out-of-State	5,769	100.0%

Headcount of International Students

Country	Headcount	% of Total International
Canada	132	23.3%
China	72	12.7%
Nepal	34	6.0%
India	30	5.3%
Saudi Arabia	26	4.6%
United Kingdom	23	4.1%
Iran	15	2.6%
France	15	2.6%
Jamaica	15	2.6%
Germany	12	2.1%
Japan	10	1.8%
Other Countries	183	32.3%
Total International	567	100.0%

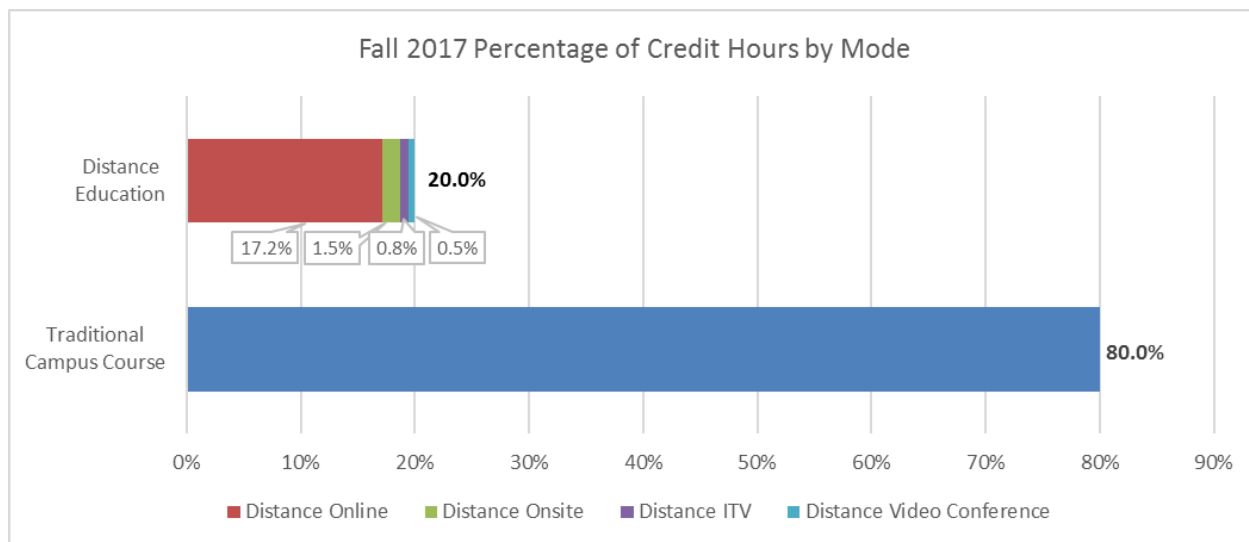
Headcount Residency Totals

	Headcount	% of Total
Total In-State	22,631	78.0%
Total Out-of-State	5,769	19.9%
Total International	567	2.0%
Total Unknown	30	0.1%
Total	28,997	100.0%

Fall 2017 Enrollment Report – The University of Maine System

Fall 2017 Distance Education Credit Hours by Mode and Campus

	UM	UMA	UMF	UMFK	UMM	UMPI	USM	Total	% of Total
Distance ITV	0.0	2,286.0	0.0	0.0	171.0	0.0	24.0	2,481.0	0.8%
Distance Online	12,385.0	16,445.0	378.0	5,014.0	2,199.0	3,688.0	13,997.5	54,106.5	17.2%
Distance Onsite	435.0	3,728.0	199.0	0.0	0.0	392.0	0.0	4,754.0	1.5%
Distance Video Conference	266.0	815.0	62.0	0.0	108.0	177.0	139.0	1,567.0	0.5%
Total Distance Education	13,086.0	23,274.0	639.0	5,014.0	2,478.0	4,257.0	14,160.5	62,908.5	20.0%
Traditional Campus Course	126,201.3	9,257.0	26,265.0	9,242.0	4,306.5	9,286.0	67,738.0	252,295.8	80.0%
Total Credit Hours	139,287.3	32,531.0	26,904.0	14,256.0	6,784.5	13,543.0	81,898.5	315,204.3	100.0%



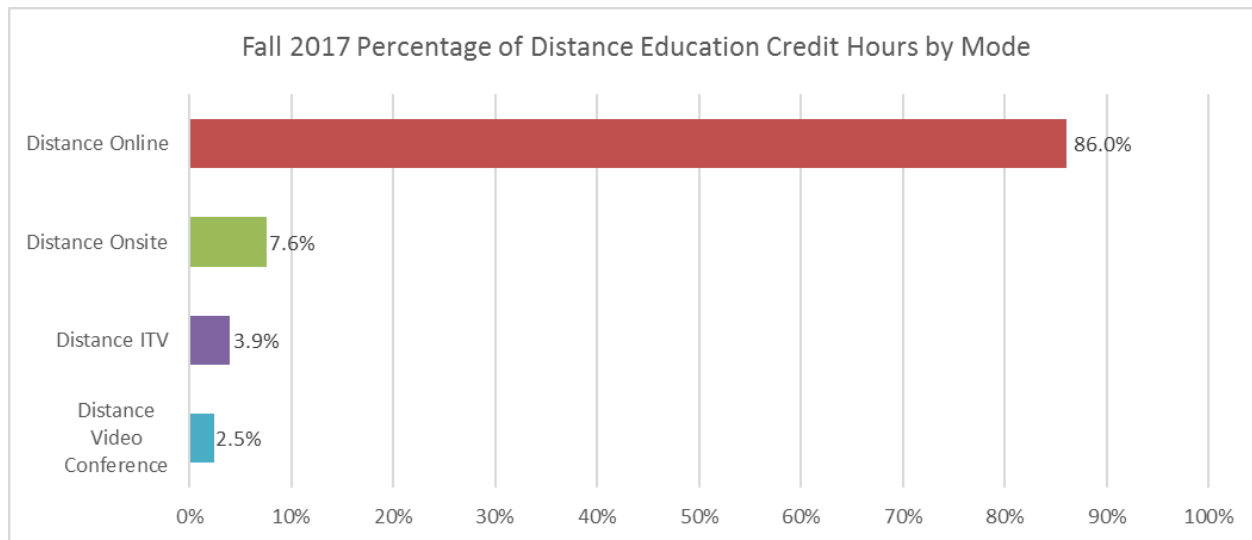
Total Semester Credit Hours by Mode

	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	% of Total	% Change		Trend Line
							1-year	5-year	
Distance ITV	6,788.0	5,222.0	4,800.0	2,908.0	2,481.0	0.8%	-14.7%	-63.5%	
Distance Online	44,244.0	49,297.0	49,630.5	52,842.5	54,106.5	17.2%	2.4%	22.3%	
Distance Onsite	5,124.0	4,742.0	5,870.0	5,468.0	4,754.0	1.5%	-13.1%	-7.2%	
Distance Video Conference	2,026.0	2,414.0	2,880.0	2,401.0	1,567.0	0.5%	-34.7%	-22.7%	
Total Distance Education	58,182.0	61,675.0	63,180.5	63,619.5	62,908.5	20.0%	-1.1%	8.1%	
Traditional Campus Course	267,313.8	256,611.8	250,224.0	252,845.3	252,295.8	80.0%	-0.2%	-5.6%	
Total Credit Hours	325,495.8	318,286.8	313,404.5	316,464.8	315,204.3	100.0%	-0.4%	-3.2%	

Fall 2017 Enrollment Report – The University of Maine System

Fall 2017 Distance Education Credit Hours by Mode and Degree Level

		Credit Hours	% of Subtotal	% of Total
Distance ITV	Associate	342	13.8%	0.5%
	Baccalaureate	2,001	80.7%	3.2%
	Non-Degree Undergraduate	114	4.6%	0.2%
	Graduate	24	1.0%	0.0%
	Subtotal	2,481	100.0%	3.9%
Distance Online	Associate	2,059	3.8%	3.3%
	Baccalaureate	43,689	80.7%	69.4%
	Non-Degree Undergraduate	4,142	7.7%	6.6%
	Graduate	3,459.5	6.4%	5.5%
	Non-Degree Graduate	757	1.4%	1.2%
Subtotal	54,107	100.0%	86.0%	
Distance Onsite	Associate	630	13.3%	1.0%
	Baccalaureate	1,154	24.3%	1.8%
	Non-Degree Undergraduate	2,532	53.3%	4.0%
	Graduate	393	8.3%	0.6%
	Non-Degree Graduate	45	0.9%	0.1%
Subtotal	4,754	100.0%	7.6%	
Distance Video Conference	Associate	160.0	10.2%	0.3%
	Baccalaureate	875.0	55.8%	1.4%
	Non-Degree Undergraduate	265	16.9%	0.4%
	Graduate	228	14.6%	0.4%
	Non-Degree Graduate	39	2.5%	0.1%
Subtotal	1,567	100.0%	2.5%	
Total Distance Education	Associate	3,191	5.1%	
	Baccalaureate	47,719	75.9%	
	Non-Degree Undergraduate	7,053	11.2%	
	Graduate	4,104.5	6.5%	
	Non-Degree Graduate	841	1.3%	
Total	62,908.5	100.0%	100.0%	





AGENDA ITEM SUMMARY

1. **NAME OF ITEM:** Awarding of Academic Degrees
2. **INITIATED BY:** Gregory G. Johnson, Chair
3. **BOARD INFORMATION:** **BOARD ACTION:** X
4. **OUTCOME:** **BOARD POLICY:**
Increase Enrollment 303 – Academic Degrees

5. **BACKGROUND:**

In accordance with Board of Trustees policy, the Board approves the awarding of academic degrees.

6. **TEXT OF PROPOSED RESOLUTION:**

That the Academic and Student Affairs Committee approves the following resolution to be forwarded to the Consent Agenda for Board of Trustee approval at the November 19-20, 2017 Board meeting:

That the Board of Trustees authorizes the awarding of degrees during Commencement ceremonies for the 2017-2018 academic year to those students fully recommended by the appropriate faculties and the presidents of the respective institutions of the University of Maine System.



Common Academic Calendar Administrative Procedure

Section 302 Common Academic Calendar

Effective: Fall 2011

Date Revised: Spring 2017

In keeping with nationwide best practices and to assist multi-campus students, students in collaborative programs, distance education students and faculty teaching at multiple campuses and sites, the University of Maine System has adopted a common academic calendar, based on the parameters below. The parameters provide a solid framework that brings structure to the system-wide academic calendar, while allowing a degree of flexibility for each individual institution to best serve its own students and pursue its unique mission.

Fall Semester

- The fall semester will start the Monday, Tuesday or Wednesday before Labor Day (when Labor Day is Sept 4-7), depending on the length and variability of student orientation. When Labor Day is Sept. 1-3, the fall semester will start on the Tuesday or Wednesday after the holiday. It is the expectation that the same start date will apply to all campuses.
- Fall Break – a one-to-three day fall break
- American Thanksgiving – a three-day break
- Veteran's Day – Each campus must observe Veteran's Day, but making it a day off is optional and dependent on where the day falls in relation to the calendar.
- A minimum of 68 class days, not including the final exam period

Spring Semester

- Start date would typically be the Tuesday after the Martin Luther King, Jr. holiday
- Break schedule:
 - One one-week break to allow for a break between spring semester and start of summer session and to allow for alignment of spring start date when necessitated by the calendar (see AY 17-18 calendar as model)
- A minimum of 68 class days, not including the final exam period

* "Calendar week" means including the week of President's Day

Procedures for Submission of Academic Calendars

Academic calendars shall be forwarded to the Chancellor for review and approval based on the given parameters. Typically, calendars are submitted to the Board of Trustees for their review no later than at their January meeting. Universities shall submit academic calendars in two-year increments. The Office of the Vice Chancellor will set the schedule for the submission of academic calendars and will notify universities of submission due dates.

Departure from an established calendar must be approved by the Chancellor.

University of Maine System
Academic Calendar 2018 - 2019

3.2

Fall Semester 2018

	UM	UMA	UMF	UMFK	UMM	UMPI	USM	UM Law School
Orientation		8/20-21						8/28-31
Classes begin	9/4	9/4	9/4	9/4	9/4	9/4	9/4	9/4
Fall Break	10/8-9	10/8-9	10/8-9	10/8-9	10/8-9	10/8-9	10/8-9	10/8
Veterans' Day Holiday ¹	11/11	11/11	11/11	11/11	11/11	11/11	11/11	
Thanksgiving Recess	11/21-25	11/21-25	11/21-25	11/21-25	11/21-25	11/21-25	11/21-25	11/21-25
Classes end	12/14	12/14	12/14	12/14	12/14	12/14	12/14	12/7
Final Exams	12/17-21	12/17-21	12/17-20	12/17-20	12/17-20	12/17-20	12/15-21	12/12-21

Spring Semester 2019

	UM	UMA	UMF	UMFK	UMM	UMPI	USM	UM Law School
Orientation		1/14-15						
Classes begin	1/22	1/22	1/22	1/22	1/22	1/22	1/22	1/22
Presidents Day Holiday	2/18	2/18	2/18	2/18	2/18	2/18	2/18	2/18
Spring Break ²	3/18-24	3/18-24	3/18-24	3/18-24	3/18-24	3/18-24	3/18-24	3/18-24
Classes End	5/3	5/3	5/3	5/3	5/3	5/3	5/3	4/30
Final Exams	5/6-10	5/6-10	5/6-9	5/6-9	5/6-9	5/6-9	5/4-10	5/6-15
Commencement	5/11	5/11	5/11	5/11	5/11	5/11	5/11	5/25

¹ Because Veterans' Day falls on a Sunday this year, Sunday classes will not meet. Each campus will decide how it will choose to recognize veterans.

² Vacation periods of one week in length are defined to start on a Monday and end on the following Sunday. Any scheduled weekend class (Saturday/Sunday) prior to the start of the vacation week will be held as scheduled.

University of Maine System
Academic Calendar 2019 - 2020

Fall Semester 2019

	UM	UMA	UMF	UMFK	UMM	UMPI	USM	UM Law School
Orientation		8/26-27						8/28-30
Classes begin	9/3	9/3	9/3	9/3	9/3	9/3	9/3	9/3
Fall Break	10/14-15	10/14-15	10/14-15	10/14-15	10/14-15	10/14-15	10/14-15	10/14
Veterans' Day Holiday ¹	11/11	11/11	11/11	11/11	11/11	11/11	11/11	²
Thanksgiving Recess	11/27-12/1	11/27-12/1	11/27-12/1	11/27-12/1	11/27-12/1	11/27-12/1	11/27-12/1	11/27-12/1
Classes end	12/13	12/13	12/13	12/13	12/13	12/13	12/13	12/6
Final Exams	12/16-20	12/16-20	12/16-19	12/16-19	12/16-19	12/16-19	12/14-20	12/11-20

Spring Semester 2020

	UM	UMA	UMF	UMFK	UMM	UMPI	USM	UM Law School
Orientation		1/13-14						
Classes begin	1/21	1/21	1/21	1/21	1/21	1/21	1/21	1/21
Presidents Day Holiday	2/17	2/17	2/17	2/17	2/17	2/17	2/17	2/17
Spring Break ³	3/16-22	3/16-22	3/16-22	3/16-22	3/16-22	3/16-22	3/16-22	3/16-22
Classes End	5/1	5/1	5/1	5/1	5/1	5/1	5/1	4/28
Final Exams	5/4-8	5/4-8	5/4-7	5/4-7	5/4-7	5/4-7	5/2-8	5/4-13
Commencement	5/9	5/9	5/9	5/9	5/9	5/9	5/9	5/23

¹ Classes do not meet on Veterans' Day. Any classes that would normally meet on this day will have a make-up day to be determined by each individual institution.

² University of Maine School of Law follows its regular class schedule on Veterans' Day and also has Veterans' Day programming on Veterans' Day.

³ Vacation periods of one week in length are defined to start on a Monday and end on the following Sunday. Any scheduled weekend class (Saturday/Sunday) prior to the start of the vacation week will be held as scheduled.



AGENDA ITEM SUMMARY

- 1. **NAME OF ITEM:** Maine Nursing Summit: Debrief
- 2. **INITIATED BY:** Gregory G. Johnson, Chair
- 3. **BOARD INFORMATION:** X **BOARD ACTION:**
- 4. **OUTCOME:** **BOARD POLICY:**
 Increase Enrollment
 Support Maine through Research and Economic Development
- 5. **BACKGROUND:**

The Maine Nursing Summit was held at the University of Maine’s Wells Conference Center on October 27, 2017. The purpose of the Summit was to bring together an influential group of policymakers, healthcare providers, educators, legislators and philanthropic organizations to identify a set of strategies for comprehensively addressing Maine’s nursing shortage. Vice Chancellor Robert Neely will provide information regarding the participation, recommendations and outcome of the Summit.



AGENDA ITEM SUMMARY

1. **NAME OF ITEM:** University of Maine Name Change Requests
2. **INITIATED BY:** Gregory G. Johnson, Chair
3. **BOARD INFORMATION:** X **BOARD ACTION:**
4. **OUTCOME:** Relevant Academic Programming **BOARD POLICY:** 309 - Organization and Establishment of Major Units
5. **BACKGROUND:**

The University of Maine requested in October, 2017 three name changes, none of which require University of Maine System (UMS) Board of Trustees approval because, according to UMS Policy (Section 309 – Organization and Establishment of Major Units), neither the mission nor the financial support of the academic units is affected.

1. from BS in Bioengineering to BS in Biomedical Engineering
2. from Department of Chemical and Biological Engineering to Department of Chemical and Biomedical Engineering
3. from UMaine's National Poetry Foundation to the Center for Poetry and Poetics.

The two proposed changes affecting Bioengineering - Biomedical Engineering are consistent with the evolution of the program at UMaine and its faculty in this discipline. The change is consistent with contemporary nomenclature and is a more effective way to characterize the current research and curricular focus of the program and its faculty. These name changes are beneficial for current Accreditation Board for Engineering and Technology (ABET) accreditation efforts, i.e., the program is in the process of completing its ABET self-study in Spring 2018 for a reaccreditation review in Fall 2018.

The third name change regarding poetry/poetics is intended to resolve confusion between UMaine's "National Poetry Foundation" (created in 1971) and the national "Poetry Foundation," which arose from a 2002 rebranding of the Modern Poetry Association. The Poetry Foundation is perhaps the best-funded and most visible entity dedicated to the promotion of poetry in the country; thus, UMaine poetry unit cannot effectively compete in digital search engines. Additionally, the name of the UMaine unit is not reflective of its function in that it neither acts as a "foundation" in the proper sense nor represents a major "national" reach.

The above changes have appropriate unit and administrative support at the Department, College, Provost and Presidential levels.

10/27/17



AGENDA ITEM SUMMARY

- 1. **NAME OF ITEM:** Early College: Update on Recommendations
- 2. **INITIATED BY:** Gregory G. Johnson, Chair
- 3. **BOARD INFORMATION:** X **BOARD ACTION:**
- 4. **OUTCOME:** Increase Enrollment **BOARD POLICY:**
- 5. **BACKGROUND:**

At this time, the campuses of the University of Maine System (UMS) offer a range of opportunities for high school students to take college level, credit bearing courses through our institutions. These opportunities fall into the following categories:

- Early Study/Aspirations (including Academ-E)
- Bridge Year Programs
- Dual/Concurrent Enrollment Programs

UMS was given a one-time supplemental appropriation of \$2 million and a biennium appropriation of \$500 thousand (per year), approved by the Legislature and the Governor, specific to the growth of Early College. With this added component and in alignment with the recommendations endorsed by the Board of Trustees in June 2016, a subcommittee of the Chief Academic Officers was formed to develop a complete set of recommendations specific to:

- developing the framework for administration of Early College,
- overseeing the development and expansion of Early College,
- determining, recommending and aligning policies and processes related to Early College across the campuses and with the high schools in the areas of academic and student affairs, and
- ensuring that students receive the authentic, quality college-level learning experience, service and support necessary to be successful (including adherence to NEASC standards for dual enrollment and making progress toward NACEP accreditation).

This subcommittee has been working over the spring and summer of 2017 to formulate a set of recommendations and an associated approach to the budget. Dr. Robert Neely, Vice Chancellor for Academic Affairs, will provide an update on the recommendations and budget coming out of the work of the subcommittee. Full implementation of these recommendations is planned for January 2018.

10/27/17

Early College Recommendations September 2017

Vision: to build a partnership between UMS universities and the Maine high school communities to foster an educational culture focused on college attainment, particularly for those who traditionally have had limited opportunities to pursue a college education.

Mission: to positively impact rates of educational attainment and success by offering early college opportunities for Maine's high school students.

Goals:

1. to increase high school graduation rates;
2. to increase the number of high school graduates attending a four-year university;
3. to increase the number of college students graduating with a degree;
4. to minimize the need for developmental courses and better prepare students to be successful in college;
5. to expand access to and opportunity for early college experiences across the state of Maine and to ultimately increase the numbers of Maine students who go onto college;
6. to minimize the debt load of graduating college students;
7. to improve the state's overall educational environment through
 - a. connections between higher education and secondary education,
 - b. providing professional development and educational opportunities to high school teachers
8. to improve the lifetime earnings of Maine's citizens.

Definition of Early College: Early College coursework is that which is undertaken by students while still enrolled in high school or home schooled within a high school curriculum. There are currently three categories of Early College within the UMS:

Early Study/Aspirations – Courses taken on campus or on line, intended to encourage more high school students to experience college campuses and coursework; partially funded (1/2 tuition) by state Aspirations funding, campuses waive the other 1/2; UM's Academ-E is included within this category

Bridge Year Program – UMS faculty members work with faculty at participating CTEs to deliver 100-level, general education coursework; juniors and seniors can graduate with up to 24 credits; typically, these programs are geared toward students who might not go on to college

Dual/concurrent enrollment – Students take college level, credit bearing courses at the high school typically taught by their faculty (who are certified as adjunct by UMS faculty); the courses are UMS courses using our syllabi and outcomes; this category

has articulated national best practice standards (NACEP). The recommendations contained within the section “Academic Considerations” pertain specifically to this category of Early College.

Tuition and Fees:

Tuition:

Short-term:

- For 2017-2018, implement a common tuition platform for “aspirations” program and dual enrollment equal to the current Aspirations funding platform from DOE,
- For 2018-2019, implement the new tuition platform passed by the Legislature as a part of the biennium budget
- consider proposal for new tuition structure for Bridge to align with other early college programs,

Long term:

- Gather data on how much EC options cost and then working with DOE, explore possible proposal to increase the reimbursement from DOE to be more reflective of cost associated with the program.
- recommend that a portion of early college tuition, after expenses, be reinvested in the program with the remainder being used at the campus’ discretion.

Fees: Establish a system-wide, aligned fee structure for EC/DE

Tuition/fee waivers or scholarships: Develop a small pool of funding to assist students who are on free/reduced lunch pay for fees or books (this assumes that we bill aspirations for the tuition). Also develop a small scholarship fund to encourage students who take Early College courses with one of our campuses to apply to and matriculate at one of our campuses.

Budget: See attached budget

Coordination and Governance:

Early College Governance Council

Establish an Early College Governance Council that will oversee all UMS activities related to Early College, and will be responsible for reviewing and acting on all recommendations coming from the Oversight committee. The Council will be comprised of a subset of Chief Academic Officers, the UMS Chief Student Affairs Officer and the Vice Chancellor for Academic Affairs.

Lead Coordinator

Reporting to the VCAA (for this function) and reporting out to CAOs, a “lead coordinator”

will:

- facilitate/convene/oversee the “Early College Quality Oversight Team,
- serve as the point person at the System level,
- interface with Maine DOE, Schools, UMS campuses, and potentially MCCS,
- be responsible for annual reporting on EC activities, and
- be responsible for working with the campuses in the development of assessment plans and other IR/data.

Early College Quality Oversight Team

Establish Early College Quality Oversight Team comprised of campus-based Early College Coordinators and other appropriate constituents.

Each campus will designate a campus coordinator/point of contact. The group should include representation from faculty participating in overseeing Early College programs, a member from student affairs/advising/student services and appropriate representation from the high schools.

The Oversight Team will be responsible for:

- ensuring that students receive the authentic, quality college-level learning experience, service and support necessary to be successful (including adherence to NEASC standards for dual enrollment and making progress toward NACEP accreditation).
- developing the framework for administration of Early College,
- overseeing the development and expansion of Early College,
- developing, recommending and aligning policies and processes related to Early College across the campuses and with the high schools in the areas of academic and student affairs, and

The Early College Quality Oversight Team would meet once each semester with appropriate subcommittees responsible for the more specific responsibilities detailed above. The Planning committee will send all recommendations to the Early College Governance Council.

Academic Considerations:

- 1) All UMS dual enrollment courses, including Bridge Year, will progress towards the 2017 National Alliance of Concurrent Enrollment Programs (NACEP) standards, or alternative standards. Any standards will include at a minimum the areas of curriculum, faculty, student, assessment and program evaluation. Any standards outside of the NACEP standards will be reviewed by the system Planning committee for dual enrollment programming. Individual campuses may seek accreditation through NACEP, but this is not a requirement.
- 2) All UMS early college programs, including Bridge year, dual enrollment and aspirations will be housed within the academic affairs structure of the respective

university in order to appropriately fulfill these standards.

- 3) In addition to position descriptions for UMS faculty coordinators/liaisons, each program will develop a position description for High School dual enrollment faculty teaching UMS courses.
- 4) Program faculty should consult with their disciplinary associations in order to follow best practices within the discipline for dual enrollment programs.
- 5) Dual enrollment programming will provide opportunities for professional development for high school faculty. This will include at least an annual meeting where high school dual enrollment teachers can meet with university faculty and staff to understand university academic policies, and work with faculty on grade calibration, syllabus development, student assessments, student learning outcomes, etc. High school faculty will also be encouraged to work with their liaisons or coordinators on a regular basis during the school year for professional development. Workshops, both in person and via videoconference technology are excellent opportunities for professional development for high school faculty. Discipline based professional development will also be provided. Whenever possible, professional development can be done collaboratively, across campuses with coordination from the lead coordinator of early college.
- 6) All dual enrollment programming will involve university faculty in classroom visits. These visits will be conducted more frequently in the early stages of the program or a course offering, but less frequently for well established academic relationships. If universities offer dual enrollment programming at a large distance from their home campus, with the approval of the home campus faculty, arrangements may be made to use faculty from other UMS institutions in these site visits.

Assessment Considerations:

- 1) Recognizing that assessment of student learning outcomes is critically important in both assuring dual enrollment program quality and in demonstrating our efficacy to the public, every dual enrollment program in the UMS will include assessment of student learning as a regular component of the program.
- 2) All dual enrollment programming will have annual grade calibration, also periodic assessment work comparing dual enrollment student work with student work on our campuses in the same classes.
- 3) Dual enrollment programming will have annual surveys of students, high school faculty and possibly dual enrollment coordinators. This will provide feedback to institutions regarding our support for these programs and also develop areas of professional development support for the high school faculty.

Position Descriptions for Faculty Coordinators/ Liaisons:

- 1) Provide guidance and support for the High School teacher regarding expectations for college level work in the class, including learning outcomes.
- 2) Provide a syllabus, handouts, examples of textbooks and examples of student work from the course.
- 3) Review student work at relevant points (at least the mid-point of the course) to calibrate grading scales to the college level and ensure that student evaluation is appropriate.
- 4) Visit each High School class on a regular basis, following the Planning committee policy (mileage reimbursement rates will apply) to observe class discussion and interaction and provide feedback to the High School teacher regarding these observations.
- 5) Complete an end-of-year assessment of each cohort's success at achieving student learning outcomes.
- 6) Meet with faculty liaisons and high school instructors at the outset of the year to set expectations in the different courses within the discipline including outcomes, textbooks, handouts and syllabi.
- 7) Review High School faculty resumes to ensure appropriate qualifications to teach UMS classes, following established review procedures on each campus.
- 8) Meet as liaisons on a regular basis throughout the year and report any concerns to the academic deans for review.

Service and Support

Application, Registration forms and Registration logistics: Develop an application and a single registration form for all early college experiences (inclusive of dual enrollment and bridge) that could be used for all institutions, available online or hard copy. If a student is taking more than one early college course from more than one UMS institution, only one registration form would be needed. Align registration timing, add/drop and withdrawal policies across all campuses for all early college but specifically for those offered at the high schools (dual enrollment and bridge).

**Student Service/Development: Academic policies for Early College students (e.g., academic integrity, etc.) shall be the same as those designated for other non-degree students ; these will be clearly communicated to students as a part of a "student handbook for Early College." Students will receive appropriate "onboarding" and orientation such that they understand how this coursework can impact future transcripts and how the policies and procedures of the higher education institution apply.

**Entry Requirements: Course eligibility is dependent on the student meeting any prerequisites required for the given course or by the department.

IR and Data Management:

Coding: Develop consistent definitions and coding for the three components of Early College

IR: Determine appropriate benchmarks for Early College; Annually produce reporting related to enrollment (and revenue impact), matriculation, retention and completion, across each campus, by each type of Early College experience and in the aggregate; need to develop a methodology for determining “true cost” of Early College in terms of early completion of (basically) general education

Marketing and Recruitment:

Branding: Each program will be co-branded, i.e., a campus program can have a unique brand such as “Rural U” or “Academ-E” but must also be co-branded as UMS Early College.

Web site: Develop a centralized web site that school personnel, parents, and students can access to get information about the varied EC/DE programs available within UMS. That site would link to (and from) individual campus sites.

Recruitment: Work with Admissions staff across the campuses to explore and implement best practices to better connect with these students as they participate in Early College, including the development of communication and outreach plans specific to this population.

Location of Programs: While it is understood that typically Universities will work with high schools located within their region, there may be instances where the high schools approach a University outside of their region for service. The Oversight committee will be charged with developing policies and procedures for the best determination of this, which may include collaboration across campuses in the offering of courses. Each high school may have preferred programs with which to work, and several schools may work with more than one college/university. Setting up a regional approach areas may reduce access for students and will only make access for some schools who are far from campuses very difficult.

Eary College Budget Model (FY 18 - FY 19)

Fixed Funding	FY18	FY19
Lead Coordinator		
Salary (Full time with Benefits)	\$91,200.00	\$91,200.00
Discretionary Outreach Fund	\$5,000.00	\$5,000.00
Travel fund	\$4,000.00	\$4,000.00
Supplies, Services & Materials	\$3,000.00	\$3,000.00
Contingency (Lead Coordinator back-fill if needed)	\$35,000.00	\$35,000.00
SubTotal	\$138,200.00	\$138,200.00
Oversight and Development		
EC Quality Oversight Team: Travel (3 meetings/yr)	\$12,600.00	\$12,600.00
EC Summit (general session and discipline based) (F)	\$15,000.00	\$15,000.00
HS faculty guidance councilor wkshop stipend (during EC summit)	\$25,000.00	\$50,000.00
SubTotal	\$52,600.00	\$77,600.00
UMS Support		
NACEP Membership	\$150.00	\$150.00
UMS IR Support	\$14,000.00	\$14,000.00
SubTotal	\$14,150.00	\$14,150.00
Fall, 2018 Matriculation: UMS EC Student Participant Scholarships	\$140,000.00	\$140,000.00
FIXED FUNDING TOTAL	\$241,750.00	\$266,750.00

VARIABLE FUNDS	
Application Process for Campuses; examples include	\$2,491,500.00
	PerCampus Targets*
HS Administrator Stipends	\$6,000.00
EC UMS website development	\$4,000.00
EC Website Development (campus based)	\$5,000.00
EC Marketing (campus based)	\$5,000.00
EC recognition/ outreach student events (U)	\$5,000.00
Support for EC Campus Coordinator (maybe salary buy-out)	\$17,000.00
Student "scholarship" for Early College Fees (S)	\$13,000.00
Student Book scholarship / fund (25% of student support)	\$9,000.00
EC Strategic Initiatives for CAO	\$5,000.00
EC Strategic Initiatives for Student Affairs	\$5,000.00
Supplies Services and Materials	\$4,000.00
Travel (to early college sites)	\$3,000.00
Faculty Capacity Expansion	\$38,000.00
EC Faculty Program Coordinator release time	\$16,000.00
Faculty Liaison (F) stipend (\$587 / section)	\$24,000.00
IR/Assessment (campus support)	\$8,000.00
Other Miscellaneous Categories	TBD

*not guaranteed, but requires justification in the context of EC growth



AGENDA ITEM SUMMARY

- 1. **NAME OF ITEM:** Maine Geospatial Institute
- 2. **INITIATED BY:** Gregory G. Johnson, Chair
- 3. **BOARD INFORMATION:** X **BOARD ACTION:**
- 4. **OUTCOME:** **BOARD POLICY:**
 All Primary & Secondary Outcomes Apply 309 – Organization and
Establishment of Major Units
- 5. **BACKGROUND:**

Each of the University of Maine System’s (UMS) seven campuses has superb faculty expertise in geographic information systems (GIS) and the application of GIS tools to other disciplines and technology needs, i.e., spatial technology. Over the past year, faculty representatives from each of the UMS campuses came together in developing a proposal “to create a statewide Geospatial Institute to support geospatial education and research, workforce development, and economic growth.” With the existing geospatial technology sector in the State of Maine (e.g., Blue Marble Geographics, CAI Technologies, Garmin, ESRI, Kappa Mapping, Tetra Tech, Stantec, James W. Sewall Company, and others), creation of the *Maine Geospatial Institute* (MGI) aligns with the *One University* initiative and allows for dramatically enhanced connections to industry, government, non-governmental organizations, and community partners, while supporting the educational mission. MGI is envisioned to have three primary functions:

- 1. Within the UMS, it will provide a statewide infrastructure for integration education, from K-12 to post-graduate and continuing education, with geospatial research and technology development. It will bridge the “digital divide” that currently separates the state’s well-served urbanized regions from under-served rural regions, expanding access to educational resources statewide.
- 2. Beyond the academy, it will provide a technologically-educated workforce able to support a growing economic sector.
- 3. It will link the education and research sector to industry, facilitating technology transfer, project collaboration, and research and development partnerships.

Key elements of the proposal include campus-based project centers for:

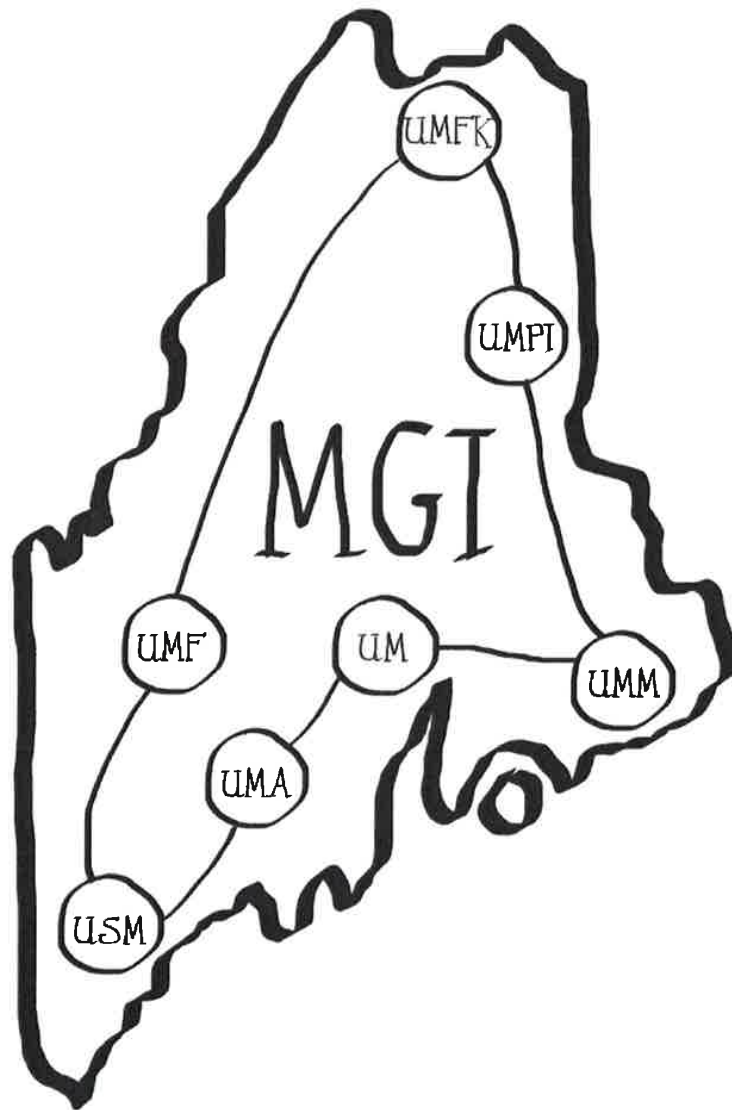
- leveraging the broad geospatial expertise within the UMS to provide access to a collaborative, high-quality suite of courses in geospatial technology across the UMS that collectively constitute a unique program in the New England region;

- achieving a designation of Center of Excellence in Geospatial Science Education at the undergraduate level;
- providing experiential learning opportunities to students using the cyberinfrastructure and advanced technologies inherent to the discipline that facilitate project-based research, learning, and collaboration over distances (“virtual projects), likely including research experiences for K-12 teachers in STEM areas;
- maintaining databases across the UMS to connect industries and agencies with UMS faculty;
- cross-sector team building to secure research funding;
- managing geospatial software, hardware and data to enable real-time access to resources across the state;
- developing and managing spatial data archives;
- connecting students, faculty, agencies and companies for collaboration and innovation;
- support the public through seminars, clinics and camps using GIS freeware, particularly with career and education planning, as well as geospatial science application in daily life.

Details about this initiative will be provided by Vice Chancellor Robert Neely and GIS faculty involved in developing the proposal.

The Maine Geospatial Institute
A Statewide Collaboration for Workforce Development, Education, and
Research to Facilitate Economic Growth

7.1



The Maine Geospatial Institute

A Statewide Collaboration for Workforce Development, Education, and Research to Facilitate Economic Growth

A. Executive Summary

Drawing on the resources of the seven University of Maine System (UMS) campuses, we propose to create a statewide Geospatial Institute to support geospatial education and research, workforce development, and economic growth. Geospatial technologies are used daily throughout Maine, nationally, and globally. Geospatial skills are vital to a rapidly growing and increasingly diverse set of endeavors including security, defense, healthcare, transportation, municipal functions, environmental services, resource management, commerce, and utilities. Maine has a significant geospatial technology sector. Leveraging existing resources, we have a unique opportunity to create a collaborative structure within the state's university system under the aegis of the "One University" initiative with expanded links to industry, government, NGO and community partners.

The Maine Geospatial Institute (MGI) will have three primary functions:

1. Within the UMS, it will provide a statewide infrastructure for integrating geospatial education, from K-12 to post-graduate and continuing education, with geospatial research and technology development. It will bridge the "digital divide" that currently separates the state's well-served urbanized regions from under-served rural regions, expanding access to educational resources statewide.
2. Beyond the academy, it will provide a technologically educated workforce able to support a growing economic sector.
3. It will link the education and research sector to industry, facilitating technology transfer, project collaboration, and research and development partnerships.

The MGI will have a physical presence on each of the seven UMS campuses through satellite Project Centers that are coordinated through a Main Project Center (Figure 1). These Centers will provide important venues for research and experiential learning-based education in geospatial science through a collaborative partnership model with industries, agencies, and communities. This MGI structure will connect faculty and students directly with research partners and collaborators, prospective student employers, and the citizenry of Maine.

The MGI will be supported through a combination of evolving revenue streams. Seed money to establish the Institute will be provided by the state of Maine through the UMS. Over time the Institute will evolve to self-supporting status through revenue from grants, donors, tuition dollars, summer camps and workshops, continuing education credit fees paid by public users,

and partner membership fees. The partner fee structure will be tiered, based on access to resources and services, with fees scaled to reflect the partner's available resources.

The MGI will draw on UMS infrastructure to deliver financial and academic management and administrative support. Initial leadership of the MGI will be provided by a Director with anticipated expansion over time to include assistant directors to manage expanding functions. We anticipate future Assistant Directors to oversee Information, Technology Transfer and Infrastructure and Community Outreach functions. The Institute will engage a Board of Advisors comprised of representatives from partner industries, agencies, UMS academic and administrative offices, and participating communities to provide guidance and feed-back on MGI activities and future directions.

B. Motivation

The U.S. Department of Labor has identified Geospatial Technology as a high growth industry area, with an annual increase in the "geospatial technology" market of nearly 35% per year, with the commercial market growing at 100% per year^[1]. As one of the fastest expanding technology markets in the country, the industry is expected to reach \$100 billion in annual sales in the next 5 years^[2]. Both public and private sectors employ geospatial professionals, and the geospatial marketplace is rapidly expanding as this technology is adopted for use in myriad everyday applications (DOL 2015; Gewin 2004). The Department of Labor has designated geospatial technology as a "high growth" industry sector with recent reports suggesting worldwide industry growth from \$4.4 billion in 2010 to \$10.6 billion in 2015 (DOL 2015).

Maine is well-positioned to participate in and lead this growth. Maine is home to a diverse group of private companies focusing on geospatial technologies, including Blue Marble Geographics, CAI Technologies, Garmin, ESRI, James W. Sewall Company, Kappa Mapping, Tetra Tech, Stantec, among several others, which have a national and global reach. Many companies developing or applying geospatial science are invested in our state and local economies and providing employment in our communities. These companies produce geospatial technologies used by state (e.g., Maine Departments of Transportation, Environmental Protection, Inland Fisheries and Wildlife, Forestry, and others) and federal agencies (Departments of Commerce, Interior, Agriculture, Defense, and others) in a wide range of contexts.

Maine stands to benefit from expanded training and research opportunities in geospatial science and technologies (Weaver and Duffy 2006; Sutton 2006; Johnson and Bampton 2007; Maine GeoLibrary 2009). Maine's geospatial workforce is aging, with an average age in the late 40s, and a large number of workers will retire in the coming decade (Johnson et al. 2010). There is a critical need for developing diverse approaches to education to train developers and users

of this technology, as well as retraining and keeping the workforce current. An MGI goal is to expand both the trained workforce and the number of job opportunities in the field.

Beyond financial growth directly within the technology market, there are rapidly expanding opportunities for research and development to create and sustain the geospatial industry. Maine is well-positioned to benefit from the growing global reliance on this technology sector, however, it is imperative that we develop an infrastructure that facilitates a collaborative integration of education, research, and application development with industry, agency, and community partners.

The MGI will build on programs and units within and across the UMS campuses that develop and apply geospatial technologies (Table 2) and more directly connect with agencies, industries, and communities across the state. The MGI will initiate new educational and research collaborations through *Project Centers* that link UMS campuses, federal and state agencies, municipalities, non-profits, and industrial and commercial corporations. The MGI will vertically integrate research with workforce training and development, K-12 through postgraduate education, and public service across the UMS (Table 3). This innovative model of shared resources, lateral linkages and vertical integration within a public-private partnership provides a template for growing a specialized technology-based economy in a demographically and economically challenged rural state that is scalable and transferable beyond the state.

C. MGI Core Functions

The aim of MGI is to facilitate collaborations of UMS faculty, scientists, and students with Maine-based, national, and global companies and agencies engaged in geospatial science and to work within and beyond the academy and into the broader community. The three core functions of MGI are: 1) Education and Research; 2) Information, Technology Transfer and Infrastructure; and 3) Community Outreach.

C.1 Education and Research:

The MGI's *Education and Research* functions will foster development of new spatial technologies through research partnerships and expand the geospatial-centered workforce by creating a pipeline from K-12 to postgraduate and continuing education. Research initiatives include:

- Conducting basic and applied research to support new spatial technology development.
- Developing research collaborations with industry and government partners within and beyond the state.
- Undertaking prototype development and system evaluation including user testing and usability studies to aid new technology and software developments.

Education initiatives include:

- Coordinating and expanding undergraduate and graduate geospatial course offerings across campuses and academic programs in the UMS
- Offering project-based learning that connects technology users and developers with student teams to undertake “real-world” problem-solving
- Connecting educational instruction with research opportunities, for example through research experience for undergraduates (REU)
- Developing geospatial data and curriculum resources to support the educational mission at all levels
- Offering training for K-12 teachers and developing teaching tools and technology to assist teachers in integrating spatial technologies into the K-12 curriculum
- Assessing workforce needs in Maine and beyond, and planning strategically to meet current and future needs
- Delivering continuing education, through workshops, seminars, short-courses, and learning opportunities to maintain workforce proficiency and increase public literacy in geospatial technology across a broad, non-traditional audience

C.2 Information, Technology Transfer, and Infrastructure:

The MGI’s *Information, Technology Transfer, and Infrastructure* function will facilitate building and maintaining collaborations among the MGI partners, management of software and hardware resources used by the MGI and its partners, and maintaining a repository of MGI products and data. This function will include:

- Developing and maintaining a database of research interests and expertise across the UMS to connect industries and agencies with UMS faculty, identify potential collaborations for research and technology development and technical assistance
- Facilitating team-building among faculty, agencies, and industries to seek and secure research funding
- Managing geospatial software, hardware, and data to enable real-time connections and access to resources across the state
- Developing and managing spatial data archives for data developed in research and technology applications
- Developing and maintaining campus Project Centers as direct venues to connect students, faculty, agencies, and companies for collaboration and innovation

C.3 Community Outreach

The MGI’s Community Outreach function will connect UMS, industry and agency partners to the broader citizen base. It is imperative that the MGI foster and maintain relevance to the public

beyond academics, industries, and agencies by bringing geospatial technology into communities across the state. Community outreach activities will develop connections between UMS scientists, industry, and agency partners with the “home” communities surrounding the UMS campuses through:

- Organizing seminars, workshops, and camps (e.g., elementary-high school, after school, summer, school breaks) to educate the “public” about geospatial science applications in daily life
- Supporting geospatial clinics in the campus Project Centers that provide assistance with geospatial “user” questions; examples include short-courses on using GPS, troubleshooting mapping with GIS freeware, and career and education planning in disciplines that develop or apply geospatial science.
- Marketing the MGI to industry, agencies, public schools, colleges in Maine, the region, nationally, and internationally through demonstrations, seminars, field days, expos, and Project Center tours

D. MGI Education Initiatives

Educational initiatives will be a priority for MGI in the start-up phase. The MGI will create a partnership between the UMS and the broader industry and user community to deliver innovative education programs in geospatial science and technologies. Prevailing evidence indicates that, broadly stated, high-quality technical education is essential to individual economic success. US Representatives Thompson (R-PA) and Krishnamoorthi (D-IL) note in the *Strengthening Career and Technical Education for the 21st Century Act* (May 2017), that, “Americans face a job market that is vastly different from the one that existed a generation ago. Advances in technology and the growth of a global economy have dramatically changed the kinds of jobs that are available, making high-quality education and skills development vital to competing in today’s workplaces.”

A broad representation of geospatial expertise exists within the UMS. Skills and interests range from investigation of the theoretical underpinnings of the field to highly specific development and research and instruction in diverse application domains. Under the MGI, we propose to integrate this collective expertise and create a pioneering model for access to high-level intellectual resources statewide, regardless of location.

A useful conceptual model for the MGI educational programs is that of a statewide “virtual department”. By removing barriers to collaboration and exchange of students, revenues, credits, and schedules, we can create a vertically integrated geospatial education infrastructure. This virtual department could conceivably touch students from grade school--via teacher education efforts--through a four-year undergraduate degree, to master’s or PhD-level, as well

as enhance opportunities for lifelong learning through continuing education. This unique approach to education meets the University of Maine System's tripartite mission to provide the state's population with "education, research and related economic development and community service". We see this model as offering a scalable and transferable blueprint for maximizing effects of scarce resources in rural contexts beyond the State of Maine.

D.1 Graduate and Undergraduate Geospatial Program Integration and Expansion

Graduate and undergraduate opportunities for geospatial training exist across the UMS but can benefit from expanded and integrated course offerings. Collectively, faculty resources across the UMS campuses address the core knowledge areas identified in the GIS&T Body of Knowledge (<http://gistbok.ucgis.org/>) providing the foundation for a broad array of geospatial related courses. Priority graduate and undergraduate education objectives of the MGI are to:

- Enhance and improve access to geospatial course offerings across campuses and academic programs in the UMS, identifying and remedying gaps in programmatic options and delivery.
- Create a suite of geospatial related courses across the UMS that constitute a collectively unique program in the New England region that qualifies for New England Board of Higher Education (NEHBE) Tuition Break program.
- Support a suite of geospatial related courses at the undergraduate level across the UMS campuses that can be designated as a Center of Excellence in Geospatial Science Education (The University of Maine has this designation at the graduate level).
- Provide research and community engaged project courses in support of learning opportunities for students.

In order to offer and deliver a common geospatial curriculum across the campuses, several current barriers and issues need to be addressed. In the start-up phase, an MGI Education Working Group will work closely with UMS administration to find solutions to these issues.

One Stop Registration: Registration integration is a necessary foundation for coordinating course offerings, confirming course pre-requisites, and managing student credits and program requirements, and ultimately for managing and assigning student tuition credits. A common registration system and timeline across the UMS is needed to integrate course offerings among campuses. We see the need for a common registration tracking number for all geospatially related courses (e.g., GIS) to aid students from different campuses to seamlessly enroll in geospatial courses on any campus. Further, students must be able to easily locate courses with a geospatial focus through common (e.g., MaineStreet) course identifiers, regardless of the campus or program in which they are offered. Discipline specific courses with geospatial

content should carry the common geospatial tracking number for ease in identifying pertinent courses.

Undergraduate Geospatial Pathways: Spatial or geospatial literacy is being recognized as an increasingly important skill, and we envision several options for students to obtain such skills. Spatial literacy has been defined as the ability to use the properties of space to communicate, reason, and solve problems (NRC 2006). A spatially literate student is expected to have knowledge of spatial concepts and spatial representations, spatial reasoning skills using a variety of spatial ways of thinking and acting, and being an informed and capable consumer of supporting tools and technologies. The NRC (2006) describes a spatially literate student as one able to critically evaluate spatial problems, evaluate the quality of spatial data, use spatial data to construct, articulate, and defend a line of reasoning or point of view in solving problems and answering questions, and evaluate the validity of arguments based on spatial information. Goodchild (2005), among others, has advocated for spatial literacy as a core competency or a general education area. One education goal of the MGI is the development of a set of courses that would meet a general education requirement for attaining geospatial literacy.

Creating a more generally “spatially competent” workforce may require new approaches. Instead of focusing on specialized skills that are the focus of GIS courses today, MGI will explore content development that contributes to general spatial competency. Spatial literacy skills transcend individual disciplines and thus there is a need to develop course offerings that span disciplines as well as different campuses.

At the undergraduate level, we anticipate that the across-system demand for geospatial courses will be met via courses that fill elective requirements in a variety of programs rather than through enrollment in an undergraduate degree specifically in GIS, although the course offerings will meet requirements of GIS-focused degrees as well. We thus envision flexible curriculum options and pathways for undergraduate students. We propose a collection of geospatial courses that could serve multiple options, for example, a geospatial minor, an undergraduate geospatial certificate, a qualifying capstone experience, or an undergraduate research experience for a student in any major. We also propose to develop a subset of these courses to qualify as general education requirements at all UMS campuses. For example, the National GeoTech Center for Excellence has developed a model geospatial awareness and literacy course adopted by undergraduate programs nationwide (GeoTech Center). UMM currently offers such a course as a freshman seminar, Space and Place, that uses hands-on activities to introduce skills and concepts of spatial thinking and geospatial literacy.

The GIS & T Body of Knowledge (BOK) documents the domain of geographic information science and its associated technologies and we propose to adopt the ten high level BOK topics:

Foundational Concepts, Programming and Development, Analytics and Modeling, Data Capture, Cartography and Visualization, Data Management, Computing Platforms, Knowledge Economy, GIS&T and Society, and Domain Applications, as an organizing structure.

Engaged, Project-Based Learning: The MGI Project Centers provide a venue for demonstration of “real-world” applications of geospatial technologies introduced to students in the general courses described above. New and enhanced course offerings through MGI will take advantage of industry and government partnerships through Project Center activities and help connect the classroom to the work environment. MGI will offer Project Center courses, similar to a capstone course, and open to junior, senior, or graduate-level students. Students enrolled in Project Center courses will work in teams on community stakeholder supported projects. While several UMS faculty currently offer such courses on individual campuses, coordination through the Project Centers will support more such courses, bring in additional community, agency, and industry partners, and engage more students through collaborative learning opportunities across the system.

As an example, one use of Project Centers to enhance undergraduate learning opportunities is to develop courses generally themed around Smart and Connected Communities. The scope of these courses would be negotiated with stakeholder partners. For example, students might work with Maine Center for Disease Control, Maine Medical Research Center and Department of Inland Fisheries and Wildlife to study the expanding problem of tick borne diseases in the state. This problem has many spatial and temporal dimensions for students to investigate, including data collection issues, data quality, misaligned spatial and temporal units of analysis, appropriate analysis techniques and effective communication of the problem to various stakeholders. By working closely with stakeholders, students would be exposed to different dimensions and perspectives on a problem along with formulation of different management strategies. Another example might involve working with co-ops, farms, farmers markets and other institutions on local food production and distribution. Additional examples are provided in the Project Centers section of this proposal.

Research Experience for Undergraduates: Research experience is one of the most effective avenues for attracting students to and retaining them in science and engineering, and for preparing them for careers in these fields. The NSF REU program funds projects that involve students in meaningful ways in specific research projects. The MGI will develop opportunities to involve undergraduates in research through NSF REUs or other mechanisms. NSF encourages projects that make use of cyberinfrastructure or other advanced technologies that facilitate research, learning, and collaboration over distances (“virtual projects”). In the MGI’s first year, we propose to develop an REU site proposal that utilizes MGI Project Centers as a natural home

for REUs. The proposal will be developed around stakeholder identified themes and reflect the unique combinations of interests and capabilities of the partnering organizations.

D.2 PreK-12 Initiatives

To meet future workforce demands for geospatial technology, students must build spatial literacy, see geospatial technology as a powerful (and fun!) tool, and be aware of career opportunities in the field even before they enter higher education. To address earlier training, MGI will build on a longstanding effort and partnership with Maine Geographic Alliance and the University of Maine at Farmington (UMF) to promote and support GIS and geospatial literacy for PreK-12 students and teachers.

Since 1991 the Maine Geographic Alliance has supported geography education and professional development for teachers in Maine. Led by UMF faculty, the Alliance sustains a network of educators that works to enhance geographic education from pre-kindergarten through university levels by assisting educators with high-quality geographic materials, lessons, and workshops for implementing Maine's learning results. In the past five years (2012-2017), the Alliance has been awarded \$210,000 in grant funding from the National Geographic Education Foundation (NGEF), the National Science Foundation's National Center for Research in Geography Education (NSF-NCRGE), and ESRI. Through partnership with UMS campus faculty and a robust network of PreK-12 educators across the state, the Alliance has developed programs that directly engage approximately 10,000 students a year, while supporting teachers through mentoring, curricular design and professional development aimed specifically at growing geospatial education.

The Alliance engages over 1,900 students per year through geospatial activities at major learning events throughout Maine, such as Earth Science Day and the Maine Science Festival. The Maine State Geography Bee, hosted annually by the University of Maine at Farmington, brings together 200 competitors, their families and supporters, to showcase and celebrate geographic knowledge. Beginning in 2008, the Alliance worked with NGEF to bring Giant Traveling Maps to Maine students and educators. Giant Traveling Maps (16' x 20') provide a tactile and kinesthetic learning experience geared to elementary students that enables deep learning of geo-literacy as well as fundamental geospatial concepts like map grid, coordinate systems, topological relationships, scale, etc. Giant Traveling Map activities are aligned to state and national standards. They cover major world regions like Europe, Africa and the Pacific, and in January 2017 included two new maps of Maine that engaged 3,425 students in nearly 44 schools and events for the first half of the year. The Giant Traveling Maps of Maine have been integrated into geography learning by public schools from New Sweden to Scarborough as well as adult education, informal educators and alternative education groups. Research efforts to

develop and assess STEM curricula utilizing Giant Traveling Maps funded through the NSF-NCRGE, promise to provide a foundation for rigorous geospatial learning beginning at elementary levels.

With UMS partners, the Alliance has hosted a long-standing series of professional development workshops that have supported PreK-12 educators' adoption of GIS in the classroom. Beginning in 2005, summer institutes have engaged 15-20 teachers in hands-on learning translating into expanded geospatial learning opportunities in Maine schools. The recent evolution of online GIS has overcome significant hardware obstacles and accelerated classroom implementation of geospatial education. In 2014, the Alliance, with partners at UMM, USM, Maine Learning Technology Initiative and the Maine Department of Education, was instrumental in establishing a no-cost site license for Esri's ArcGIS software and ArcGIS Online subscriptions for PreK-12 schools statewide. As part of this licensing agreement with Esri, the Alliance, UMM and USM have committed to supporting teachers in adopting GIS in the classroom through workshops, technical assistance, and hosting of online resources. Currently, 78 schools across Maine maintain an ArcGIS Online Organization account.

This innovative work will be continued and expanded through a PreK-12 focused MGI Project Center based at UMF. A central role for this MGI Project Center will be to support teacher education programs across UMS campuses in incorporating spatial literacy and geospatial technology into their curricula. The Alliance is particularly invested in integrating geospatial learning across a variety of STEM subject areas, aligned with state standards, while streamlining the coordination of program delivery. This MGI Project Center will provide a resource for the Alliance to expand PreK-12 curricula to specific content areas (e.g., forestry, agriculture, nature-based tourism, migration) and enhance learning experiences for students across Maine.

Research Experiences for Teachers: In a related effort, the MGI will work to expose more teachers to geospatial research activities. NSF encourages research experiences for K-12 teachers of science, technology, engineering, and mathematics and the coordination of these experiences with REU projects. The MGI will seek support to engage K-12 teachers in geospatial research projects and application development. We see the MGI Project Centers as providing an ideal setting to foster this coordination between teachers, UMS researchers, and research partners.

E. Campus Project Centers

A central tenet of the MGI is the development and maintenance of dedicated *Project Centers* on each UMS campus that can become engines of economic, technical, and intellectual growth. Experiential project-based learning provides students with opportunities to apply classroom

instruction to “real-world” problems while gaining workplace skills. Developing learning opportunities in partnership with industries, agencies, and communities forges connections between students and prospective employers, where they learn how to work in cross-disciplinary teams to address complex questions, and experience the workflow of a “real-world” job from concept through development to application and evaluation. MGI Project Centers will provide venues to develop, foster, and achieve this collaboration. Project Centers will also offer an important community service where teams of undergraduate and graduate students can work collaboratively with community stakeholders to address community issues. Project Centers will thus help link the MGI directly with communities and build relationships and educational opportunities that benefit the non-academic community. Project Centers coordinated through the MGI will be located at each UMS campus with the following goals and approaches:

- Projects undertaken through the Campus Project Centers will be proposed collaboratively by faculty/staff, students, agencies, industries, municipalities, NGOs, or nonprofits (hereafter “partners”). *See Attachment A for examples of projects potentially suitable for Project Center involvement.*
- Undergraduate student teams will be selected and matched with partners based on interests, skills, and project requirements
- Undergraduate student teams will be advised by MGI faculty/staff and partners, who will work with teams to address community and/or partner spatial information research questions from project start to finish
- Graduate students may work through a Project Center as interns or as part of a thesis or dissertation project, with oversight provided collaboratively by faculty and industry/agency advisors
- Graduate students may work in collaboration with faculty advisors to mentor undergraduates, seek external funding, or use graduate assistantships to support projects
- Center projects may provide opportunities for Continuing Education training for project partners
- Faculty and partner representatives will collaborate to ensure projects meet both academic and partner needs
- Project Centers provide a location for team meetings, project work, and remote conferencing with expertise within state, regional, national, and global networks
- Project Centers would occupy a currently existing physical space on each campus, providing dedicated student workspaces, conference spaces, and research and faculty offices as needed, as well as a place to showcase the campus’ Project Center work.

- The Main Project Center located at a central location would serve as a system-wide showcase for selected projects produced in the campus Project Centers, as well as serve as the location for housing MGI central staff and their MGI management activities.

E.1 Project Center Participation Structure

Campus Project Centers and the Main Project Center will be supported through a combination of funds generated from UMS resources, grants, donors, summer camps and workshops, and continuing education credit fees paid by public users, and partner membership fees. Partner fee structure would be tiered based on access to resources and services. Fees would be scaled to reflect the partner resources (e.g., global or large businesses pay a larger fee than state agencies or municipalities for the same service, reflecting the resources they have available to commit). An example fee structure might be:

- Tier 1: Partner pays a set membership annually, which provides access to clinics, short-term technical assistance (sort of a HELP desk staffed by students and faculty mentors), seminars, equipment trouble-shooting
- Tier 2: Partner works with MGI associated faculty and graduate and undergraduate students to address a short-term information need (e.g., programming help, graduate student assistantship for a semester to help with a specific, short-term question or technical assistance task)
- Tier 3: Partner works with Project Center student teams to address specific research needs. This tier would provide the partner access to the annual Project Center student/faculty interview process, wherein the partner would submit a list of 3-5 information needs to be considered for a project; student teams working with faculty advisors would work directly with the partner to plan and carry out the project over 1-2 semesters. Project products would be a thesis/report/manuscript developed collaboratively with the faculty and partner, a physical product such as equipment developed in the project, a database, a video presentation, etc., determined at the beginning of the project in the project plan or proposal developed collaboratively by the partner and project team.

F. MGI Leadership Structure

The MGI leadership would represent the functions of the MGI, with reliance on existing UMS infrastructure to deliver financial, administrative, and academic management. A reporting line to the system (rather than through a single campus of the UMS) is suggested given the cross-campus and statewide integration of partners, and ultimately national and global reach, of the MGI. Direction and oversight of MGI functions are sufficiently extensive to require dedicated positions as opposed to additional responsibilities for current faculty and staff. We see MGI staffing evolving as the Institute evolves. Initially we propose a Director and Administrative

Assistant for the MGI. The MGI Director would initially oversee fundraising, marketing, identifying industry, agency, municipality, and NGO partners; develop the MGI mission and strategic plan; and, work to identify collaboration opportunities with entities in the state, nation, and globally.

A draft position description for the MGI Director is provided in Attachment B. During year one of the proposed start-up plan, roles and responsibilities of the Director and the need for additional supporting positions will be evaluated and refined. Following establishment of the founding partnerships, Project Centers, and academic coordination across the UMS, additional leadership positions may be established to fully support all core MGI functions.

To support the Director in the MGI startup phase we propose the following working groups, comprised of faculty from the UMS campuses and MGI partners as appropriate:

UMS Education Working Group. This working group will coordinate the academic program initiatives outlined in Sections D1 and D2. This working group will identify available courses, evaluate course sequencing, compile and coordinate course schedules, identify content gaps and outline a plan to add new courses, including course options for K-12 teacher training, in service, and continuing education.

K-12 Education Working Group. This working group will collaborate with the Maine Geographic Alliance to establish and enhance statewide initiatives to train K-12 teachers as outlined in Section D2.

Project Centers Working Group. This working group will work to establish the location of the Main Project Center, identify space on each campus to serve as the Project Center space as needed, and identify a set of high profile projects for the start-up period. This working group will also identify and engage prospective partners for identification of projects of mutual interest.

Governance Working Group. This working group will work with the Director on developing policy, financial management, and governing rules for the Institute. This working group will work with system administration on developing solutions to address tuition sharing, scheduling of courses, MGI credit-bearing courses, and allocation of appointment credits and other cross campus operational issues that need to be addressed.

Infrastructure Working Group. This working group will work closely with system administration to develop plans for distance and online instructional support and with the Advanced

Computing Group (AGC) at Orono on distributed computing, software licensing, computing platforms, data and services management, and data and service archiving.

Community Partnership Working Group. This working group will work with the Director to foster relationships with the public to help the MGI maintain relevance with the Maine public, broadly, for example, through community outreach opportunities for workshops, field days, and demonstrations of applications of GIS and spatial science around the state during festivals, science fairs, and other similar public venues. This group, along with the Director, will have oversight of website design and content production.

G. MGI Funding

The MGI's long-term funding goal is to be supported through a combination of funds provided by the UMS, partner "tier" fees, grants, donations, K-12 camps, etc., with "seed" funds provided by the UMS to incrementally begin building the MGI and partnerships central to development of the Project Centers.

H. MGI Start-up Phase (September 2017 - December 2019)

Our proposal for the MGI startup period includes the following tasks and outcomes:

Task 1: Identify working group members and set meeting schedules.

Task 2: Set up the Main Project Center and Campus Project Centers. In year 1 we will identify space for project centers and identify 2-3 high visibility projects to be undertaken by MGI. The Project Centers and Project Center activities serve key roles in the development of all MGI core functions of research, education, and outreach. The initiation of MGI thus depends on early success of project selection and development. These first high visibility projects will be used as marketing tools to help recruit partners, create publicity for recruiting students, serve as Project Center course prototypes, provide data and content for courses and training workshops, and provide opportunities to engage communities across the state. The Project Centers Working Group will lead this task with participation from the MGI Director once this person has been selected. The Main Project Center will serve as the location for the Director and staff person(s) and will ideally be determined prior to the Director coming on board.

Task 3: Hire MGI Director and support staff. The Governance Working Group will finalize the Director position description and recruit and hire an MGI director to be in place as early as January 2018. An administrative assistant to help with MGI start-up task coordination would be desirable starting in Fall 2017 and would thereafter provide administrative assistance to the MGI Director.

Task 4: Create MGI website. Marketing of the MGI in the initial years is critical. To create early visibility for the Institute we propose to develop a set of high profile projects coordinated across the state through the Project Centers. These will be selected to maximize partner and community engagement and student interest and participation. The MGI will develop an active website and social media presence to promote its activities and gain visibility. A website development contractor will be engaged in Fall 2017 to develop the website design so that it is ready to go live with active content in early 2018.

Task 5: Develop Comprehensive Education Plan. Covering years 1 and 2, the Education Working Group will undertake a comprehensive inventory of courses across the system that could qualify for a geospatial tracking number, identify gaps in knowledge areas with respect to BOK subject areas, develop a plan for new courses, develop course sequences and obtain approval for a system wide undergraduate Geospatial Minor, develop and obtain approval for a Project Course for students engaged in Project Center work.

Task 6: Identify MGI Infrastructure needs. Because the campuses and Project Centers are geographically dispersed, effective on-line collaborative infrastructure will be essential for the success of MGI functions. Collaborative and distance learning technologies are needed to deliver the proposed cross campus MGI education programs, connect Project Centers and serve as a community-enhancing platform for sharing content, experiences and support and building relationships across the system and stakeholder communities. Online collaboration tools should have the right functionality and be easy to use. In year 1, the Infrastructure Working Group will conduct research on available technologies, identify desired features for online collaboration tools and work closely with system administration and IT to find workable solutions.

I. MGI Start-up Budget Request

825
660 PIF + 50
225

MGI Start-Up Budget (September 2017 to December 2019)				
TITLE	Budget 2017 18	Budget 2018 19	Budget 2019 20	Budget Total
Project Director		80000	80000	160000
Administrative Assistant	5000	15000	15000	35000
Employee Benefits	2600	49400	49400	101400
Total Personnel	7600	144400	144400	296400

523 unallocated

152,000

72

OTHER DIRECT COSTS				
Materials & Supplies	100	100	100	300
Meals - Non-travel	200	300		500
Working Group Support	4000	8000	3000	12000
Web Design	4000			4000
Total Other Costs	8300	8400	3100	16800
Totals	15900	152800	147500	316200

7.1

J. Maine Geospatial Institute Budget Justification

The total budget request for the operation of the Maine Geospatial Institute (MGI) for September 2017 to December 2019 is \$316,200.

The budget covers salary for the MGI Director for years 2018 and 2019 and salary for a half time administrative assistant starting in Fall 2017. The budget includes funds (\$4000) to contract a web designer to develop an MGI website in Fall 2017. The remaining balance of the budget is devoted to travel, materials, and meeting expenses for the working groups. We have allocated \$4,000 in Fall 2017, \$8000 for 2018 and \$3000 in 2019 to support planning activities of the working groups and the MGI Director. These funds include costs for a joint meeting of all working groups and the MGI Director in early 2018. We anticipate the Director will travel to each of the 7 campuses to visit Project Centers, meet with faculty, staff, and students and attend industry, government, and non-profit events and meetings to publicize and advocate for the MGI.

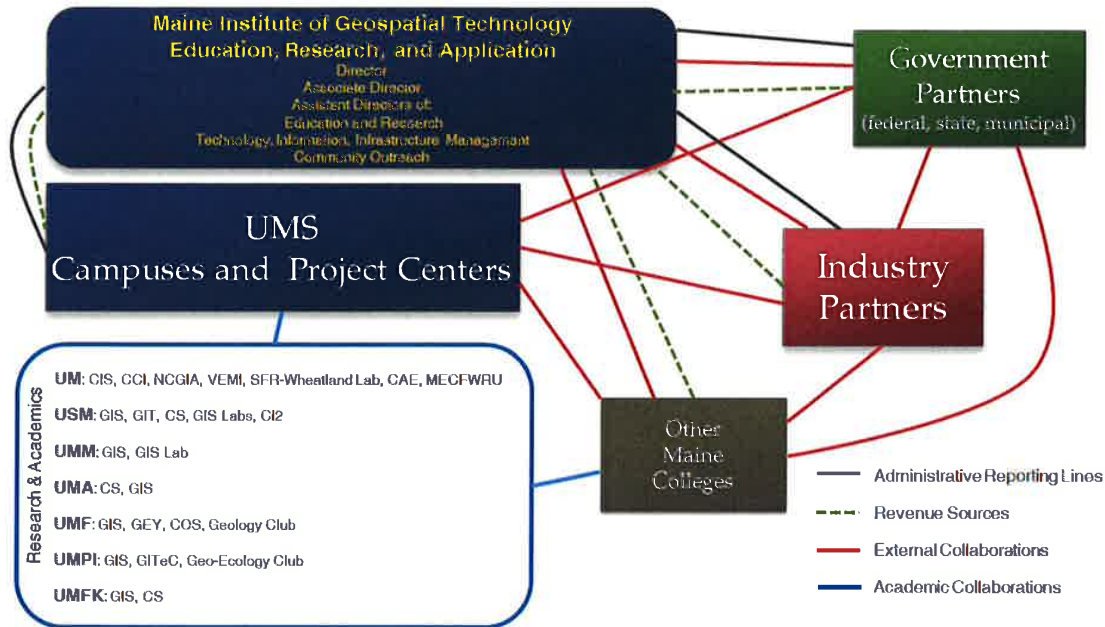
The budget justification is as follows:

1. Interim Director salary: \$80,000. Half time Administrative Assistant salary at \$5000 for 2017 and \$15000 in 2018 and 2019.
2. Interim Director benefits: \$41600 and Administrative Assistant benefits. Benefits are calculated at the projected 2018 fringe benefit rate of 52%.
3. MGI travel & working group expenses for faculty and Director: Yr 2017 1 \$4000; Yr. 2018 \$8000, Yr 2019 \$3000. Expenses are based on two meetings for working groups and an ongoing schedule of travel and meetings within and beyond the state for the Director.

Meals: Yr 2017 \$200; Yr. 2018 \$300. This is a limited budget for meal expenses to cover refreshments for a planning meeting in 2017 and a joint working group meeting with Director and partners in 2018.

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7.1

Figure 1. Conceptual diagram of the Maine Geospatial Institute organization, leadership structure, revenue and partnerships.

Table 1. Benefits of the Institute to Maine’s citizens through collaborations among the University of Maine System, State of Maine (agencies, municipalities), Industry, and NGOs.

Benefits to UMS:

- Aligns with the One University initiative.
- Connects geospatial research, development, and commercialization labs (including VEMI South) throughout the state, with individual campus focus determined by interests, strengths, and research and education needs
- Expands the Center of Academic Excellence in Geospatial Sciences education to all UMS campuses
- Provides accreditation for the Geospatial Intelligence Certificate for any eligible students across the UMS campuses
- Establishes new web-available undergraduate, graduate, and continuing education distance learning opportunities in Spatial Technologies (statewide to global opportunity)
- Provides a home for training that responds to government, industry, and educational spatial technology needs (e.g., camps, workshops, seminars, short-courses)
- Facilitates collaborations among geospatial faculty on all campuses with industry and government for research, education, and technical assistance

Benefits to the State of Maine:

- Operates as a central broker to coordinate geospatial related activities in Maine (connecting citizens to research, industry, and academics)
- Capitalizes on the UMS's spatial expertise to create an expanded and collaborative geospatial business environment in Maine
- Provides a student pipeline for job-ready training and new entrepreneurship through experiential learning opportunities with industry and government (federal, state, municipal)
- Establishes a public outreach campaign that highlights UMS's spatial programs, initiatives, and research outcomes as well as their significance to the state.
- Provides an accessible resource to the public for education and technical assistance

Benefits to Industry, NGOs, other Private Sponsors:

- Formalizes relationships between industry and the UMS by collaboratively fostering and conducting training, teaching, and research
- Establishes a user testing facility with industry partners to support new software development and to provide testing services for emerging technologies and integrates this with the UMS education mission
- Promote new SBIR/STTR opportunities between UMS campuses and Maine corporate partners
- Develops a system-wide clearinghouse for corporate challenges for capstone and graduate projects, student experiential learning in the concept-to-application sequence, and showcases their work with annual Student Presentation Events to deliver results and demonstrate new innovations
- Develops a plan for supporting internships that connect Maine's geospatial technology industries, NGOs, agencies, and municipalities.

Table 2. Disciplines in which UMaine campuses or Maine “customers” use or develop spatial science and technology

	UMaine System Campus							"Customers"			
	UM	USM	UMM	UMA	UMF	UMPI	UMFK	State Agencies	Federal Agencies	Industry	NGOs
Anthropology		X	X		X				X		
	X	X	X		X	X			X		
Art		X									
		X	X								X
Biology	X	X	X		X			X	X		X
		X	X		X	X	X	X	X		X
Civil and Environmental Engineering	X							X	X		
	X							X	X		
Communications and Journalism										X	
	X									X	X
Computer Engineering	X										
	X										
Computer Science	X	X		X							
	X	X		X	X						
Computing and Information Science	X	X									
	X	X									
Cultural Studies											
	X	X									
Earth and Climate Sciences	X	X	X		X	X		X	X		
	X	X	X		X	X		X	X		
Ecology and Environmental Sciences	X	X	X		X			X	X	X	X
	X	X	X		X	X		X	X	X	X
Economics	X		X						X	X	
	X	X	X		X	X		X	X	X	X
Education		X			X			X			X
	X	X	X		X			X			X
Food Science and Nutrition											
	X										
Forestry	X		X				X	X	X	X	X
	X		X		X		X	X	X	X	X
	Current										
	Likely Growth										

Table 2, continued. Disciplines in which UMaine campuses or Maine “customers” use or develop spatial science and technology

7.1

	UMaine System Campus							"Customers"			
	UM	USM	UMM	UMA	UMF	UMPI	UMFK	State Agencies	Federal Agencies	Industry	NGOs
Geography		X			X						
		X			X	X					
History	X	X				X					
		X				X					
Horticultural Sciences, Agricultural Production									X	X	
									X	X	
International Affairs		X							X		
	X	X							X		
Law		X									X
		X									X
Marine Science	X	X	X					X	X		
	X		X					X	X		
Nursing		X									
	X	X									
Parks, Recreation, Tourism	X		X		X			X	X	X	
	X	X	X		X	X		X	X	X	
Planning		X	X		X			X			X
		X	X		X			X			X
Political Science			X								
	X	X	X								
Public Health		X									
		X			X			X			
Public Safety & Emergency Planning			X				X	X			
			X				X	X			
Social Work, Child Development	X	X	X					X			
(Sustainable) Agriculture	X		X		X						
Wildlife Ecology	X	X	X		X			X	X		X
	X	X	X		X			X	X	X	X
	Current										
	Likely Growth										

Table 3. Geospatial Institute functions and UMaine campuses or “customers” contributing to that function.

Function	UMaine System Campus							"Customers"			
	UM	USM	UMM	UMA	UMF	UMPI	UMFK	State Agencies	Federal Agencies	Industry	NGOs
Education											
K-12			X		X			X	X		X
	X	X	X		X	X	X	X	X		X
Undergraduate	X	X	X	X	X	X			X		
	X	X	X	X	X	X	X		X		
Graduate	X	X							X		
	X	X	X						X		
Continuing Ed/Professional	X	X	X				X	X	X	X	X
	X	X	X	X	X	X	X	X	X	X	X
Non-Degree (Certificate)	X	X	X		X	X					
	X	X	X	X	X	X	X				
Research											
Software Development & Spatial Engineering	X							X	X		
Data Collection & Development	X	X	X		X	X	X	X	X	X	
	X	X	X	X	X	X	X	X	X	X	
Geospatial Intelligence	X								X	X	
	X		X				X		X	X	
Geospatial Technology Education		X	X		X				X		X
		X	X		X	X			X		X
Applied/ Interdisciplinary Research	X	X	X	X	X	X	X	X	X		X
	X	X	X	X	X	X	X	X	X		X
Data Visualization/ Cartographic Design	X		X		X			X	X		X
	X	X	X		X	X	X	X	X		X
	Current										
	Room for Growth										

Table 3, continued. Geospatial Institute functions and UMaine campuses or "customers" contributing to that function.

	UMaine System Campus	"Customers"
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Function	UM	USM	UMM	UMA	UMF	UMPI	UMFK	State Agencies	Federal Agencies	Industry	NGOs
Technical Assistance (for agencies, industry, NGOs)											
Compiling Data or Technical Resources	x	x	x		x	x		x	x		x
Collaborative R&D	x	x	x		x	x		x	x		x
Professional Development	x	x	x		x			x	x		x
Beta Testing & Evaluation			x								
Technical Support		x	x		x	x					
Infrastructure											
Data Archiving and Stewardship	x	x						x	x	x	x
Web Hosting	x	x	x		x			x	x	x	x
Supercomputing/High-Capacity Data Storage	x	x									
								x			
		Current									
		Room for Growth									

Attachment A: Example Project Center projects:

- 1) *Complex interactions among forest ecosystems, economies, and rural communities: Interdisciplinary research to enhance system resilience (University of Maine, Orono Campus)*

This project seeks to evaluate new applications of low-value wood fiber production in developing Maine’s forest-based economy, to better understand connections among forest ecology and management, dynamics of individual and community health, and the nexus with public policy, to foster resilience that leads to long-term persistence of this complex ecological-social-economic system. The study takes a transdisciplinary approach to: 1) evaluate how rural

communities have responded to and recovered from past/current economic crises linked to forest resources; 2) use emerging research areas, STEM education, and citizen engagement to build capacities to detect and respond to social-ecological change dependent on forest industries; 3) develop new and diversified economic forest-industry based opportunities such as nanomaterials, recreation, and tourism; and, 4) support development of technology and social infrastructure to encourage innovations in forest-based economies. To date, research team members have been working within their disciplines to examine selected effects of forest management on the ecological and social systems; this new collaboration is the focus of a recent EPSCoR proposal that, if awarded, will facilitate and enhance integration of this research across disciplines via opportunities in emerging forest nanotechnology development.

This project is well-suited for MGI Project Center involvement. The 15+ faculty participants span >12 departments and schools on the Orono campus, and planned collaborations among the participants and their national and global partners is integral to achieving the project's overall goals of fostering a sustainable forest of the future. The project offers a variety of potential opportunities to partner with industries in Maine, the nation, and worldwide that are reliant on geospatial technology application or development (e.g., emerging nanotechnology development, applications, and evaluation; remote sensing data acquisition/processing/modeling, and management and distribution of large datasets; ecosystem response and services evaluation of harvested forests and the landscapes in which they are embedded; knowledge in economic and social systems development of rural communities; and adaptation of emerging technologies by industries and communities). Although initially centered on the Orono campus, the project will provide numerous opportunities to collaborate across the UMS, and student involvement at the undergraduate and graduate levels in this activity is well-suited for the MGI Project Centers. Additionally, the project's goals to enhance rural community economic resiliencies to forest industry dynamics requires active engagement of those communities, and the MGI Project Centers provide the natural social and academic space for those interactions to occur, for example through public seminars, workshops, demonstrations, and continuing education.

2) Resource Access in Rural Communities (University of Southern Maine, Portland)

Maine is a largely rural state. Much of the state's land area is geographically remote. In the interior regions this is the result of distance, poor transportation infrastructure, and a dispersed population. In the coastal regions the population is distributed among islands, necks, and separated by estuaries. Consequently, outside the state's four major urban areas, Greater Portland, Bangor, Augusta, and Lewiston-Auburn a significant proportion of the population is under-resourced and underserved. These problems are multi-faceted. Much of the state is

designated as a medically underserved region. 50% of the state's economic activity resides in its three southern-most counties. A wide and diverse array of services is lacking in the rural parts of the state, including specialized hospital care, disability services, mental health provision, air and rail transportation, food security, cultural amenities, and high-speed internet access. The inhabited townships of rural Maine have a population that is often poor, and often in the top two quintiles of age. The state's Native American population is predominantly rural. Maine's rural population tends to be less educated, less likely to be in full-time employment, and more likely to struggle with mental and physical health issues. In sum, those most likely to need access to resources and high-level services are frequently least likely to have access to them.

The Muskie School of Public Service has two programs that explicitly address the question of rurality and access to resources and services. The Policy and Planning program has an ongoing research effort to identify areas of the state at greatest risk from food insecurity, and areas of the state at greatest need for investment in transportation infrastructure. The Public Health program in collaboration with the Cutler Institute for Health and Social Policy, has a broad strategic effort underway to identify regions of the state where there are the most severe shortfalls in healthcare provisions. This effort has four broad foci: Children, Youth, and Families; Disability and Aging; Justice Policy, and; Population Health and Health Policy. Each of these projects addresses an area of policy essential to the collective well-being of Maine's population. Each addresses an issue in which the particular human and physical geography of the state is a determining factor. The collection, archiving and analysis of pertinent spatial data is central to effectively addressing these issues.

USM hosts Maine's only Planning Program, and Maine's only Public Health program. Under the umbrella of the Muskie School of Public Policy these two programs share close links to the undergraduate program in Geography-Anthropology, which is the center of USM's GIS capacity. If appropriately supported and resourced the combination of ongoing research efforts, graduate and undergraduate education programs, and USM's GIS resources will be highly competitive in seeking external grant funding, and will provide a vital public service in a proven area of dire need for the state.

3) Supporting Rural Governance through Low-Cost, Accessible Mapping and Decision Support Tools

Since its founding in 2005 UMM GIS Service Center has engaged undergraduate students in service learning and internship projects producing maps, spatial models, and decision support tools that empower small, rural communities to make decisions and plan for a prosperous and

sustainable future. Each project involves collaboration with multiple partners such as community leaders, nonprofits, regional planning organizations, researchers at other UMS campuses, and state agencies. Funding comes from grants and contracts. This work not only increases GIS capacity in the Downeast and Acadia regions, it also spurs demand for GIS services and create jobs for graduates.

In the context of an MGI project center, this work will be aided and supported in a variety of ways. Two current projects serve as examples. One project supported by the Maine Space Grant Consortium and another project for the Downeast Conservation Network involve a combination of researchers, undergraduates and graduates based at UMM and multiple UMS campuses. Without the structure of a formal collaboration, faculty have been required us to expend precious time and effort devising myriad workarounds and ad hoc arrangements for project planning, administration, budget management, purchasing, and advising. MGI will streamline many of these administrative and collaborative hurdles, and resources can be more easily shared across the system. Also, as an MGI project center, it will be easier to leverage resources and expertise from larger campuses in support of projects in the more remote regions of the state.

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Attachment B: MGI Director Position Description

The University of Maine System seeks a creative, highly motivated individual to lead the development of a Maine Geospatial Institute (MGI). The Director is responsible for the day to day operations of the Institute, including programmatic, administrative, and organizational activities. The Director is highly visible to the local, regional, national, and international community of geospatial science users and developers and is actively engaged in integrating the MGI in research, economic, and educational issues statewide with a wide range of public and private sector stakeholders. The Director oversees the completion and execution of the MGI's strategic plan and mission statement, connecting University System resources with geospatial technology needs across the state of Maine. Central to the post will be coordinating the development of statewide collaboration among Project Centers at the seven University of Maine System campuses in Augusta, Farmington, Fort Kent, Machias, Presque Isle, Orono and Portland and with public and private partners of the MGI.

ESSENTIAL FUNCTIONS:

- Leads the implementation of MGI's strategic vision and work plans
- Represents MGI to industry, academic, educational and governmental constituencies in the state, facilitating and coordinating sharing expertise and activities with stakeholders and partners.
 - Represents MGI and UMS to media and the public domain on technical, scientific, and economic development and business related issues.
 - Coordinates with working groups on MGI's research and education, technology and infrastructure management, and community engagement missions
 - Disseminates MGI's products to external GIS-user communities and decision-makers including high level policymakers, business leaders, and community members.
 - Develops competitive grant and contract proposals to support the MGI missions, solicits business, and negotiates agreement terms for external revenue streams

SUPERVISORY RESPONSIBILITIES:

The Director has primary responsibility for hiring, supervising, and managing MGI staff including professional and administrative staff.

BUDGET RESPONSIBILITIES:

Responsible for administering the MGI's annual budget. The Director is also responsible for soliciting, proposing, and securing outside revenue streams for MGI, in coordination with MGI faculty, as appropriate.

PUBLIC AND PROFESSIONAL ACTIVITY RESPONSIBILITIES:

Participates in technical, industry and economic development conferences, meetings, workshops, and other networking events statewide, but also at national and global events. This

includes presenting research conducted at MGI Project Centers, serving on panel discussions, and representing the MGI in public venues, as well as responding to media inquiries.

Acts as an ambassador and liaison between the MGI and the broader scientific, technical and economic development community in Maine.

INTERNAL AND EXTERNAL COMMUNICATION RESPONSIBILITIES:

Relays relevant economic development information and happenings to internal MGI faculty, staff and students.

Represents and promotes MGI and UMS to statewide scientific, technical, and economic development stakeholders and builds external networks. Meets and converses with external ED stakeholders frequently.

Develops outreach and marketing communications to promote MGI and solicit revenue streams and other funding opportunities.

Acts as a spokesperson to media outlets for MGI. May be called upon by local, state, and national media outlets to coordinate UMS faculty or MGI partner insight into relevant issues.

Coordinates between the University of Maine and other educators and researchers in the state and region, including K-16 students, graduate students, professional bodies and non-profits on issues involving the MGI mission areas.

QUALIFICATIONS:

Required:

- Demonstrated experience in project development and grantsmanship
- Demonstrated experience in team building and managing collaborative projects.
- Demonstrated experience in administration and management of large research/education facility
- An advanced degree with at least 5 years of professional experience
- Excellent working knowledge of research and applications of geospatial technology in education, business, public policy, natural resources management.

Preferred:

- Demonstrated experience in economic development
- Excellent verbal and written communication skills
- Strong presentation and negotiating skills
- Well-developed network of scientific, technical and economic development stakeholders in the region, nationally, and globally
- Strong understanding of the role of universities in regional economic development

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AGENDA ITEM SUMMARY

1. **NAME OF ITEM:** Program Approval: World Language Education
2. **INITIATED BY:** Gregory G. Johnson, Chair
3. **BOARD INFORMATION:** **BOARD ACTION:** X
4. **OUTCOME:** **BOARD POLICY:**
 Relevant Academic Programming 305.1 - Program Inventory, Review and Elimination
5. **BACKGROUND:**

The University of Maine at Farmington (UMF), with one course contribution from the University of Maine, has proposed to offer World Language Education programs in Spanish and French (K-12). Within the State of Maine, as well as nationally, schools are facing a crisis in filling teacher positions in World Languages. According to the August, 2016 publication of Teacher Shortage Areas Nationwide Listing for 1990-1991 through 2016-2017, the State of Maine has faced a teacher shortage in the areas of French and Spanish since 1998. Thus, a shortage of fully-certified educators has led to unqualified teachers in classrooms, the elimination of world language course offerings in elementary, middle, and high schools, and the decision of at least one district to offer language courses using proprietary software.

UMF’s development of World Language Education programs in Spanish and French will provide an opportunity for students interested in teaching languages in K-12 classrooms to become certified in these content areas and help fill the needs of K-12. At this time, few institutions in Maine offer a program leading to the language certification. Salient aspects of the proposed program include:

- partnership with the University of Maine providing MLC 466 – the Teaching of Foreign Languages;
- existing instructional capacity in the Education, French, Spanish and elective courses at UMF;
- no additional requirements for budget, equipment or space;
- development of:
 - EDU 370 Field Experience in World Language Education - a one credit course to supplement MLC 466
 - EDU 480 Student Teaching and Seminar in World Language – not a new course, but aligns a student teaching section with the UMF methodology for student teaching sections;

- ample availability of high quality practicum and student teaching placements.

5. TEXT OF PROPOSED RESOLUTION

That the Academic and Student Affairs Committee forwards the following resolution to the Consent Agenda for the Board of Trustees meeting on November 19-20, 2017

That the Board of Trustees authorizes the creation of the World Language Education programs in Spanish and French for the University of Maine at Farmington.

University of Maine System Program Proposals

- I. Full program title: World Language Education: Spanish (K-12)
World Language Education: French (K-12)

II. Program objectives:

A. Narrative description of program rationale

Within the state of Maine, as well as nationally, schools are facing a crisis in filling teacher positions in World Languages. There is a significant shortage of fully-certified educators, which, unfortunately, has led to unqualified teachers in classrooms; the elimination of world language course offerings in elementary, middle, and high schools; and the decision of at least one district to offer language courses using proprietary software.

UMF's development of World Language Education programs in Spanish and French will provide an opportunity for students interested in teaching languages in K-12 classrooms to become certified in these content areas within a small, residential, public liberal arts college setting. More importantly, this program will provide certified teachers who can help fill the needs of K-12 schools and ensure that world languages continue to be an important component of a student's education.

B. General program goals

Our principle goal in establishing this program is to prepare our students to meet the needs of the State of Maine (and beyond) in response to the critical shortage of certified world language teachers as identified by the US Department of Education and the Maine Department of Education.

C. Specific student outcomes or behavioral objectives

1. World Language Education graduates must have met Maine's Common Core Teaching Standards
2. Students must pass the Core Academic Skills for Educators and World Languages Praxis II
3. Students must meet Maine Standards for certification

Please see Appendix A for a full listing of outcomes

III. Evidence of program need:

- A. Existence of educational, economic, and social needs to include citations or specific authorities or studies consulted

According to national statistics as cited in the annual publication of [Teacher Shortage Areas \(TSA\) Nationwide Listing for 1990-1991 through 2016-2017](#) that was published August 2016, the state of Maine has faced a teacher shortage in the areas of French and Spanish since 1998. With the exception of Connecticut, this shortage has existed, and continues to exist, throughout the rest of New England, the area of greatest UMF recruitment and employment post-graduation.

In a release dated October 7, 2015, the [Maine Department of Education](#) further confirms the national statistics in a release identifying World Languages as a teacher shortage area for Maine in 2016-2017. A recent news story published in the [Portland Press Herald](#) discussed the teacher shortage in schools across the state and highlighted Madison Area Memorial High School's decision to use the computer program Rosetta Stone because of the lack of certified teachers. Another story addressing the shortage was posted in the [Bangor Daily News](#) on October 16, 2016.

Over several years, members of the Kennebec Valley Superintendents Association, the Western Maine Superintendents Association, and the UMF Education Advisory Council have asked about the possibility of preparing world language teachers because there has not been an applicant pool of qualified candidates for open positions. Each organization has been briefed about our program planning and is enthusiastic and supportive of this new direction.

According to Jay Ketner, Maine Department of Education's World Language Specialist, "100% of high schools are required to offer language learning for proficiency-based diploma requirements, and the majority of middle schools offer some sort of language learning opportunities, ranging from complete programs at the middle level, or, more commonly, exploratory programs which offer much less instructional weeks/year. That said, with the proficiency-based diploma requirements, many middle schools are expanding or trying to expand their language programs. At the elementary level, around 10% of elementary schools in Maine offer language learning opportunities for students....Your plan to develop a Teacher Ed major for French and Spanish is indeed exciting!"

- B. For 2-year programs, indicate potential employers who have requested the program and their specific employment projections
This is not applicable.
- C. Detailed survey of similar programs that are offered within the University System, other higher education institutions or other agencies within the state.
Very few institutions in Maine offer a program leading to certification as can be seen below.

The University of Maine offers a degree in Secondary Education: Foreign Languages, and four to five students graduate from that program annually.

The University of Maine Fort Kent offers a B.A. in French and students are able to complete a minor in secondary education that leads to certification. There is currently one French major and, in recent years, two students have completed the minor leading to certification.

The University of Southern Maine had a pathway to certification for undergraduates, but those programs have been eliminated. One student studying Spanish will finish next year.

Last year, Bates College had two students graduate prepared for certification in a World Language, and there are no students seeking it this year.

Bowdoin College has graduated seven students since 2009 with certification in World Languages.

Colby College graduates one student every three years prepared to teach French or Spanish.

- D. Enrollment projections for five years. (Support data shall be attached.) We project a small number of students enrolling in the program over the next five years. A review of Admissions' Target X data collected from college board list purchases and inquiries indicates that 118 students have expressed interest in French, Spanish, or Foreign Language as a possible program of study. This does not reflect interest in teaching a world language because the System has not captured that data in the past; this can be modified in the future.

A review of College Board data for 2018 graduates from New England revealed approximately fifty students interested in French and Spanish as intended programs of study.

Based on the data listed above, and informal conversations with students currently enrolled at UMF, we project that program enrollment will start with three students the first year, and grow by one to two students each year.

The goal is to attract new students interested in a small, liberal arts college experience, but there are no additional costs associated with this program even if there are very few students who select it.

- IV. Program content. The opening paragraph will indicate the holistic nature of the program design in narrative form with attention to such items as listed below but not limited to

these:

- A. Outline of required and/or elective courses (not syllabi);
List of the courses in the program:

Credits	Major Requirements (52 credits total, 8 of which are Gen Ed)
2	EDU 102 Experiences of Schooling: Foundations of Diversity and Knowledge in American Education
2	EDU 103 Diversity and Social Justice Education 7-12
2	EDU 222 Learning with Technology in Secondary Education
4	EDU 223 Curriculum, Instruction, and Assessment
4	EDU 224 Practicum Field Experience/Seminar
2	SED 220 Inclusive Schools and Special Education Services
4	SED 361 Teaching Children with Learning and Behavior Problems in the Regular Classroom or SED 360 Teaching Students with Disabilities and At-Risk Conditions in the Secondary General Classroom
4	ENG 224 Teaching English as a Second Language
3	University of Maine's MLC 466
1	EDU 379 Field Experience in World Language Education
4	EDU 402 Philosophy, History and Cultural Diversity of Education
16	EDU 480 Student Teaching and Seminar in World Language Education K-12
4*	PSY 225S Child and Adolescent Development *counts towards Gen Ed A grade of C or higher must be earned in PSY 225S
4*	MAT 120M Introductory Statistics *counts towards Gen Ed A grade of C or higher must be earned in MAT 120M

NOTES:

- All courses except the new methods course are offered every semester.
- Most students who study abroad one semester generally still graduate in 4 years.

- All of these requirements are the same as for Secondary Education majors, except the methods course and student teaching are specialized and World Language Education majors will not take EDU 307- Teaching English Language Learners in Secondary/Middle Schools (2 credits) and EDU 308- Texts and Teaching (2 credits) but will take ENG 224- Teaching English as a Second Language instead.

Credits	French Concentration Course Requirements (40 credits total)
4*	FRE 101H Elementary French I *counts towards Gen Ed
4	FRE 102H Elementary French II
4	FRE 201H Intermediate French
4	FRE 300 Advanced French for Communication
16	<u>Selected from FRE courses or approved courses taught in French</u> FRE 206H Oral Communication and Culture FRE 301 French Film FRE 302 People and Cultures of the Francophone World FRE 303 People and Cultures of France FRE 191 Conversation at French Table Other appropriate upper level courses
4	One 400-level French (FRE) course
4**	<u>Selected from FRE courses or approved courses taught in English related to French</u> INS 100H Introduction to International & Global Studies -- Humanities HTY 204S: Introduction to Caribbean History HTY 310: Revolutions in the Atlantic World POS 227S: African Politics Other courses taught in English related to French may fulfill this requirement if the course is accepted by the Humanities Division as meeting the program goals. **may count towards Gen Ed

Credits	Spanish Concentration Course Requirements (40 credits total)
4*	SPA 101H Elementary Spanish 1 *counts towards Gen Ed
4	SPA 102H Elementary Spanish 2
4	SPA 201 Intermediate Spanish 1

4	SPA 300 Advanced Spanish for Communication
16	<u>Selected from SPA courses or approved courses taught in Spanish</u> SPA 202 Readings and Composition SPA 206 Oral Communication and Culture SPA 301 Hispanic Film SPA 302 Peoples and Cultures of Latin America SPA 303 Peoples and Cultures of Spain Other appropriate upper level courses
4	One 400-level Spanish (SPA) course
4**	<u>Selected from SPA courses or approved courses taught in English related to Spanish</u> INS 100H Introduction to International & Global Studies -- Humanities ANT 210S: Latin American Cultures and Contexts ANT 270S: Ancient Latin America GEO 212S: Latin America: Peoples and Environments HTY 214S: Spain from 1000-1700 HTY 224S: Cultural History of Spain (travel course). HTY 259S: Colonial Latin America HTY 260S: Modern Latin America HTY 261S: History of Mexico Other courses taught in English related to Spanish may fulfill this requirement if the course is accepted by the Humanities Division as meeting the program goals. **may count towards Gen Ed

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- B. Development of new courses and/or what they may displace;
- EDU 480 Student Teaching and Seminar in World Language Education K-12--This is not a new course, and it aligns with the way that UMF identifies all other sections of student teaching (EDU 450, EDU 460, ECH 460, EDU 490, SED 460). Students from multiple programs are assigned to the same supervisor and seminars. No new resources are needed.
 - EDU 379 Field Experience in World Language Education--this course is a 1-credit course to supplement the 3-credit University of Maine MLC 466 in order for students to reach the 128-credit total for graduation and allow students the opportunity to be in language classrooms.
- C. Type of research activity, if any, in program design;
A significant research project is not required of this program.
- D. Nature of independent study, clinical experience, and/or field practica employed in curricular design;

Students will enroll in the practicum and student teaching courses required of all education majors. An additional observational field experience will be required. Placements will be made with great intentionality so teacher education candidates have the opportunity to work with students learning French and/or Spanish in K-12 classrooms.

- E. Impact of program on existing programs on the campus
 At least initially, the number of students enrolling in this program is expected to be small so there is adequate capacity in the Education, French, Spanish, and other elective courses associated with the proposed programs. In fact, upper-division language courses stand to benefit from increased enrollment. Potentially, the program will offer opportunities to students in French/Spanish minors to go beyond the language learning skills.

There are no field-related concerns as a sufficient number of high quality practicum and student teaching placements exist, and there is capacity for supervision and support from existing university field supervisors and mentor teachers.

V. Program Resources

A. Personnel

1. Vita of faculty who will assume major role for program to be included in appendix
2. Specific effect on existing programs of faculty assignments to new program.

Courses taught in the new program are ones that exist in current programs, with the exception of the new 1-credit field experience EDU 379. This course can be handled within existing faculty loads and faculty assignments will not be affected.

B. Current library acquisitions available for new programs.

- Approximately 68,000 volumes in house, of which 1659 fall into the subject area of education—these were acquired for an undergraduate collection.
- Through the URSUS system, access to over 3,000,000 volumes at the six other campuses.
- Through the University of Maine System databases, access to over 4,000 journals full-text, covering a variety of subject areas.
- Through the University of Maine System databases, access to ERIC, PsycInfo, and PsycArticles, as well as a number of other general and subject-specific journal databases.
- 54 hard-copy journal subscriptions in house, of which 6 are education-related. (Many more are, of course, available online.)

- A limited number of books will be added to the library to support the study of second language acquisition.

C. New equipment necessary for new program and plan for its acquisition and Implementation

No new equipment is necessary.

D. Additional space requirements, if any, including renovations

No additional space is needed.

E. Extent of cooperation with other programs, both on the initiating campus and other Campuses

Dr. Jane Smith was consulted in Fall 2016 about offering UM's methods course MLC 466/566, The Teaching of Foreign Languages, to UMF students. She agreed that UMF students could take this course and it was agreed by the campuses that it would automatically be accepted for transfer. UMF and UM will discuss modifications to delivery mode to optimally serve all students.

At the UMS World Languages Program Integration meeting held on February 2, 2017, faculty from UM, UMF, UMFK, and USM discussed UMF's proposal. Dr. Jane Smith reaffirmed her commitment to offering the methods course, as well as making other upper level French and Spanish courses available to UMF students. UMF is also open to potential collaborations with other campuses. During the same meeting, Dr. André Siamundele was asked if he would be interested in teaching courses on Francophone Africa to support UM's MAT program. Dr. Jeanine Uzzi, the provost assigned to the group, was present at the meeting where the conversations took place.

At a system-wide World Language Program Integration meeting on March 24, 2017, faculty again discussed the UMF WL proposal. There was general support from all faculty present for the proposal, provided that a 400-level language course would be added to the UMF requirements. In addition, the conversation resulted in a preliminary proposal for a 4+1 collaboration between UMF and UM for students who graduate from UMF with a degree in World Language Education to pursue the M.A.T. at UM and complete it within one year (by counting 9 student teaching credits from UMF toward the advanced degree).

UMF and UM faculty and administrators met on March 30, 2017 to discuss the proposal. The provosts, the deans of Education, and representative faculty from each campus discussed the proposal and agreed to modifications that will benefit both campuses. The current proposal reflects those changes.

The Department of Certification will be consulted to ensure that the proposed program meets all criteria for certification so that UMF graduates complete an approved program and are immediately eligible for certification.

VI. Total financial consideration

A. Estimate of anticipated cost and anticipated income of the program for five years.

No additional costs are anticipated because students will enroll in courses currently offered in Education, French, Spanish, and areas listed as electives.

B. Detailed information on first-year costs, including:

1. New personnel requirements (including employee benefits);

There are no new costs associated with the program

2. First-year revenue and identity of sources;

It is difficult to predict first-year revenue because the program was not marketed to new students during this year's recruiting cycle. We will begin recruiting students once we receive all program approvals. Information About the program will be shared with Foreign Language Association of Maine (FLAME) this March. Revenue will come solely from student tuition. There are no new costs associated with the program.

3. How operational costs are to be absorbed into current campus operating Budget over a 5-year period;

There are no new costs associated with the program.

4. What additional funding is required to support the program (identify the source);

There is no new funding required to support the program.

5. Lifetime of outside or independent funding and plan for how and when-- becomes part of E & G budget

No external funding is associated with the program.

VII. Program evaluation

A. A post audit of an approved new program must be made after two years

B. The results of the audit must be reported to the Vice Chancellor for Academic Affairs

Appendix A

Learning Goals:

Philosophy, Purposes and Goals

Our candidates will become the educational leaders of the 21st century who are caring teachers, competent educators and confident professionals (C3TEP). These guiding principles and beliefs reflect the ideals we hold for ourselves, our candidates, and the students and communities with whom they will work.

Caring Teachers:

- Build respectful relationships
- Create communities of learners
- Support and encourage successful learning for all students
- Honor and respond to differences
- Utilize knowledge of human development

Competent Educators:

- Design, plan, implement and evaluate instruction
- Use best practices for instruction and assessment
- Know content and strategies for integration
- Communicate clearly and effectively
- Solve problems creatively and constructively
- Use the tools of a changing world

Confident Professionals:

- Collaborate effectively with families, communities, and colleagues
- Practice reflective, self-directed, life-long learning
- Demonstrate a commitment to ethical and legal responsibilities
- Contribute to and lead in diverse societies

Maine Standards for Initial Teacher Certification

Our essential goals and purposes are embodied in the Maine's Common Core Teaching Standards:

Learner Development

Standard 1.) Learner Development:

The teacher understands how students learn and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

Standard 2.) Learning Differences:

The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that allow each learner to reach his or her full potential.

Standard 3.) Learning Environments:

The teacher works with learners to create environments that support individual and collaborative learning, encouraging positive social interaction, active engagement in learning, and self motivation.

Content

Standard 4.) Content Knowledge:

The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners.

Standard 5.) Innovative Applications of Content:

The teacher understands how to connect concepts and use differing perspectives to engage learners in critical/creative thinking, and collaborative problem solving related to authentic local and global issues.

Instructional Practice

Standard 6.) Assessment:

The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to document learner progress, and to guide the teacher's on-going planning and instruction.

Standard 7.) Planning for Instruction:

The teacher draws upon knowledge of content areas, cross-disciplinary skills, learners, the community and pedagogy to plan instruction that supports every student in meeting rigorous learning goals.

Standard 8.) Instructional Strategies:

The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to access and appropriately apply information.

Professional Responsibility

Standard 9.) Reflection and Continuous Growth:

The teacher is a reflective practitioner who uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (students, families, and other professionals in the learning community), and adapts practice to meet the needs of each learner.

Standard 10.) Collaboration:

The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

Technology

Standard 11.) International Society for Technology in Education Standards for Teachers (ISTE Standards-T): Effective teachers model and apply the International Society for Technology in Education for Students (ISTE standards-S) as they design, implement, and assess learning experiences to engage student and improve learning, enrich professional practice; and Provide positive models for students, colleagues, and the community.

Assessment Criteria

Within the context of each program, candidates are evaluated based on important knowledge, skills and dispositions in the areas of:

- Content Knowledge
- Effective Planning
- P-12 Learning
- Diversity
- Dispositions
- Technology

- Curriculum Planning, Instruction, and Assessment as demonstrated in Student Teaching or Internship
- Achievement of Standards



AGENDA ITEM SUMMARY

1. **NAME OF ITEM:** Faculty Representatives: Discussion
2. **INITIATED BY:** Gregory G. Johnson, Chair
3. **BOARD INFORMATION:** X **BOARD ACTION:**
4. **OUTCOME:** **BOARD POLICY:**
University Workforce Engagement
5. **BACKGROUND:**

The Faculty Representatives to the Board of Trustees will discuss the creation of a site for communication/collaboration with faculty across the campuses and with Administration. Elizabeth Turesky, Faculty Representative from the University of Southern Maine, will lead the discussion.

October 24, 2017

UMS BoT Faculty Representatives request for a 'Communication Platform'

Background

Starting in Fall 2016 the BoT Faculty reps have been discussing amongst themselves and with the Chancellor, Vice Chancellor and Trustee Johnson the need for better communication procedures.

Our Duties and Obligations document outlines that we are the main conduit of information from our campus faculties to the BoT and vice versa.

Additionally, we feel that in order to participate fully in the Academic and Student Affairs subcommittee, we need better access to information and discussions on policies being examined at the CAO level.

While we use a common google doc folder amongst ourselves, this has not met all of our needs and serves more as a repository of shared documents.

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Our Needs

We would like a multi-level access* platform that would provide:

- a) A place for direct communication between reps;
- b) A place for communication from the Chancellor, Vice Chancellor and other relevant System and BoT entities;
- c) A place for us to send information/requests to our faculty senates/assemblies and for them to send information/requests to us.

While we would like control of this resource, we do not feel we have the time or capability to develop and maintain it. It has been suggested using Google Drive in a specific format may meet our needs; or something similar to the BoT portal system.

We are requesting help from relevant IT and/or UMS administration to suggest best options, build the chosen platform, and train the faculty representatives on its use.

*although the reps would have access to all parts of the platform – all other groups would have limited access to relevant sections only



AGENDA ITEM SUMMARY

1. **NAME OF ITEM:** Student Representatives: Discussion
2. **INITIATED BY:** Gregory G. Johnson, Chair
3. **BOARD INFORMATION:** X **BOARD ACTION:**
4. **OUTCOME:** **BOARD POLICY:**
5. **BACKGROUND:**

The Student Representatives to the Board of Trustees have determined an agenda of topical areas they would like to address with the Academic and Student Affairs Committee. They will discuss these with the Committee; the discussion will be led by Samuel Borer, UM Undergraduate Student Representative to the Board of Trustees.