
Assessing Core Competencies: Results of Quantitative Literacy and Reasoning Assessment

Graduating Seniors
2019 Fanuchånan (Fall)

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Quantitative Literacy and Reasoning Assessment Results Highlights

2019 Fanuchånan

The Quantitative Literacy and Reasoning Assessment (QLRA), an online multiple-choice test, developed by Dr. Eric Gaze at Bowdoin College is a tool for assessing quantitative literacy among US four-year colleges and universities. The University’s Mathematics Department began using this instrument in 100 and 400 level Math courses since 2014. The University Assessment Committee adopted the QLRA in 2017 as the Institutional Instrument for Institutional-Level assessment.

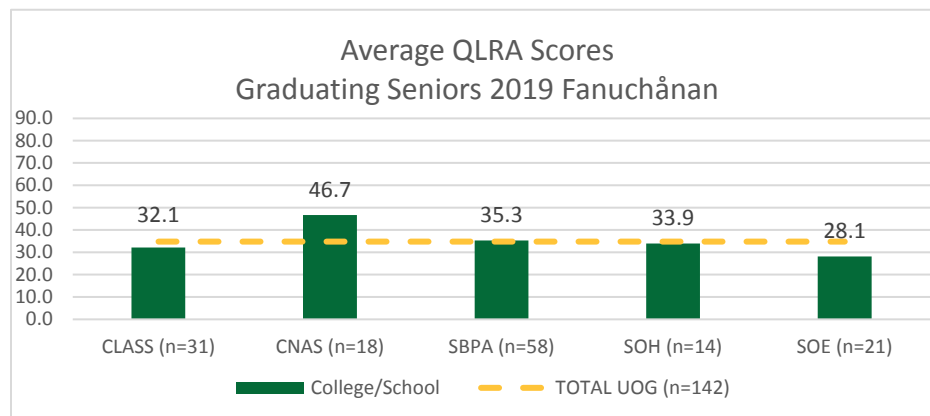
Possible scores for this assessment range from 0% through 100%. Of the 142 graduating seniors who took the assessment across all disciplines, the average score was **34.8%**. This score is a 6.5-percentage point *decrease* from the previous semester, Fañomnåkan 2019.

To serve as a factor in the analysis of results, students were asked if they took the following courses at UOG: MA-085: Fundamentals of Math, MA-110: Basic Mathematical Applications, and MA-151: Introductory Statistics.

56% of seniors who indicated they had taken MA-085 received an average score of 30.1% while the students who did not take MA-085 scored an average of 40.9%. While this course is not required, students who get placed into developmental math must pass this course before proceeding with MA-110 or higher.

68% of seniors indicated they took MA-110 and they received an average score of 32.0%. The 32% who did not take MA-110 received an average score of 40.8%. Although MA-110 is a general education requirement, students may opt to take an equivalent course or higher.

44% of seniors had taken MA-151 and their average score was 33.6%. Those who did not take the course received an average of 35.8%. It is interesting to note that the average score of students who took Introductory Statistics were slightly lower than those who did not take the course, which follows the same pattern as the previous semester’s results.



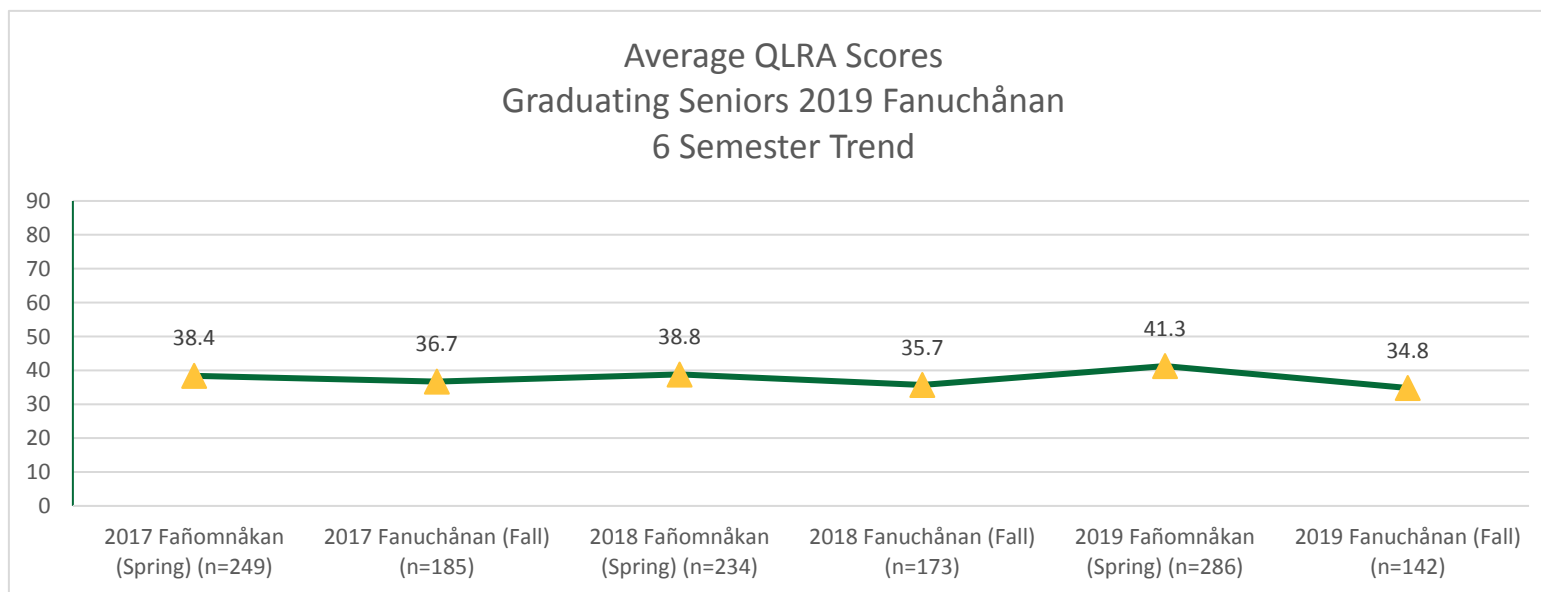
This graph displays the average scores of students in each college/school with the UOG average trendline at 34.8%.



Quantitative Literacy and Reasoning Assessment - Graduating Seniors Average Scores

AVERAGE Scores

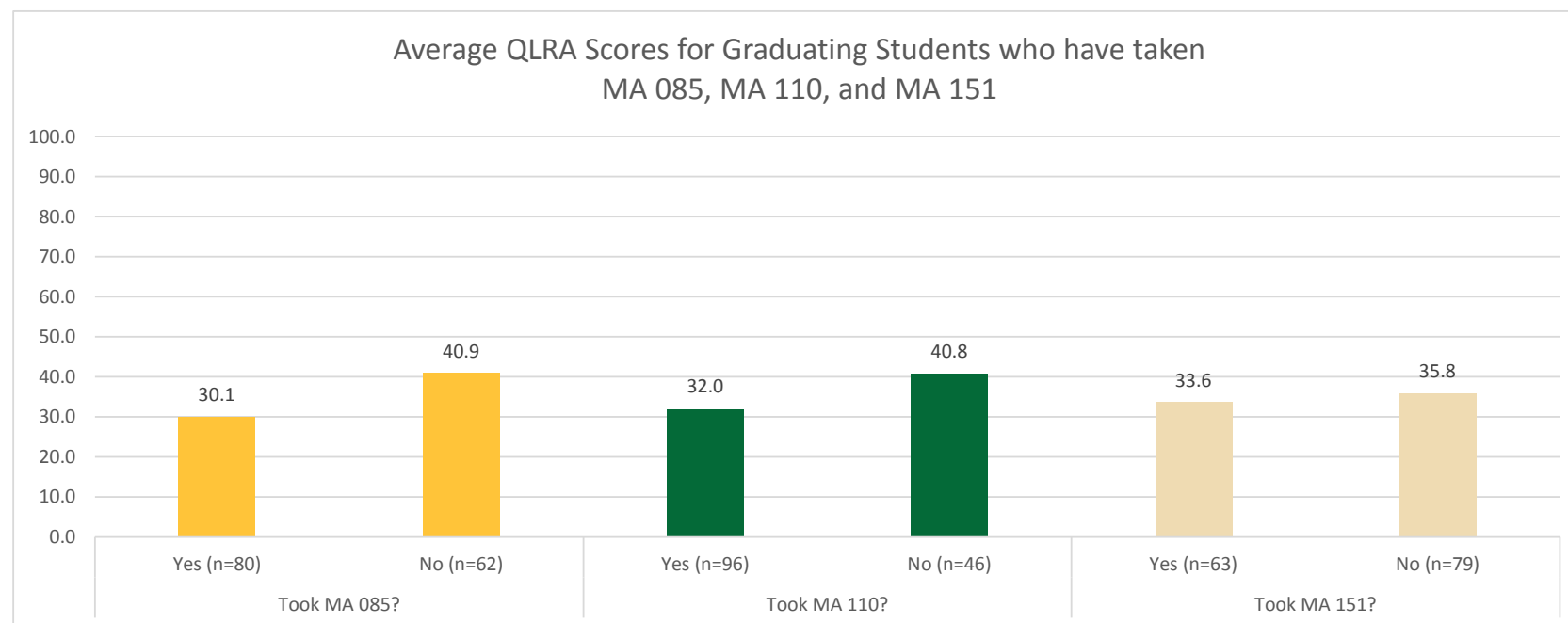
	2017 Fañomnåkan (Spring)	2017 Fanuchånan (Fall)	2018 Fañomnåkan (Spring)	2018 Fanuchånan (Fall)	2019 Fañomnåkan (Spring)	2019 Fanuchånan (Fall)	Six- Semester Average
Count	249	185	234	173	286	142	212
Avg Grade	38.4	36.7	38.8	35.7	41.3	34.8	37.6
Std Dev	18.4	16.8	18.1	17.2	17.9	16.7	17.5





2019 Fanuchånan Quantitative Literacy and Reasoning Assessment Average Scores by Course for Graduating Seniors

	Total	Took MA 085?		Took MA 110?		Took MA 151?	
		Yes	No	Yes	No	Yes	No
Count	142	80	62	96	46	63	79
Percent	100%	56%	44%	68%	32%	44%	56%
Avg Grade	34.8	30.1	40.9	32.0	40.8	33.6	35.8
Std Dev	16.7	13.2	18.7	14.1	20.0	14.4	18.3

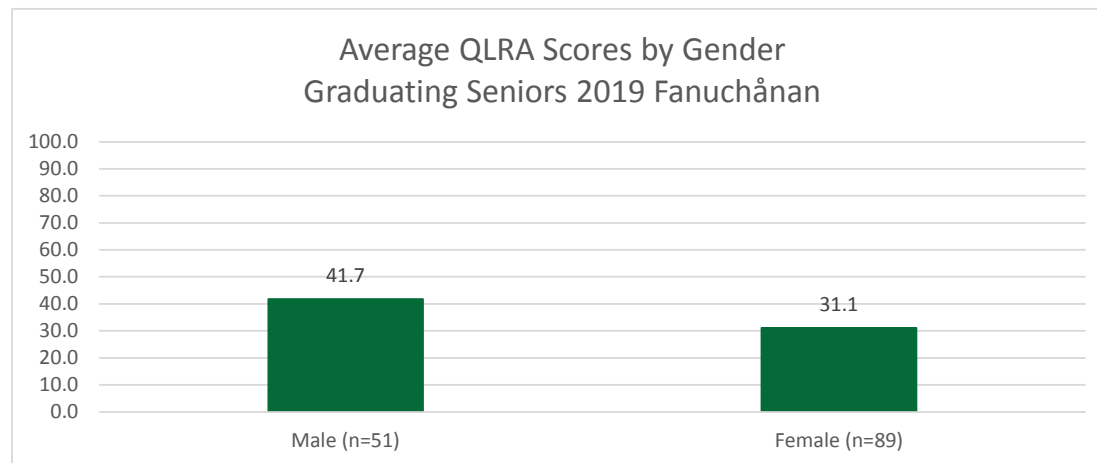




2019 Fañomnåkan Quantitative Literacy and Reasoning Assessment Average Scores by Gender for Graduating Seniors

	Total	Gender	
		Male	Female
Count	142	51	89
Percent	100%	36%	63%
Avg Grade	34.8	41.7	31.1
Std Dev	16.7	19.5	13.7

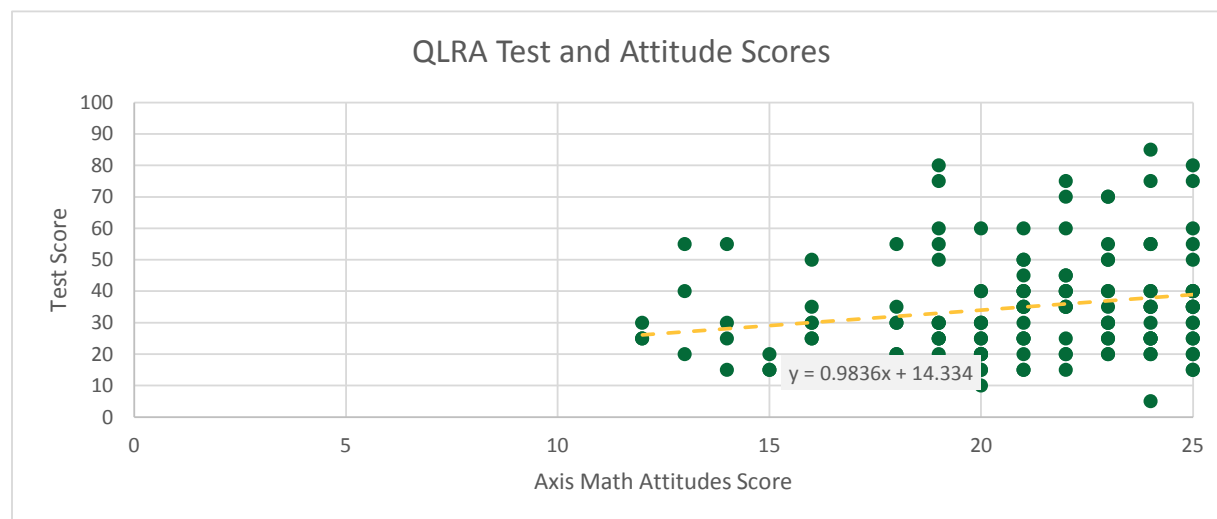
Two students declined to specify gender





2019 Fanuchånan Quantitative Literacy and Reasoning Assessment Math Attitudes - Indirect Assessment

Question	Response	Count	Percent
Numerical information is very useful in everyday life	Strongly Agree	89	63%
Numbers are not necessary for most situations	Strongly Disagree	41	29%
Quantitative information is vital for accurate decisions	Strongly Agree	73	51%
Understanding numbers is as important in daily life as reading and writing	Strongly Agree	87	61%
It is a waste of time to learn information containing a lot of numbers	Strongly Disagree	81	57%

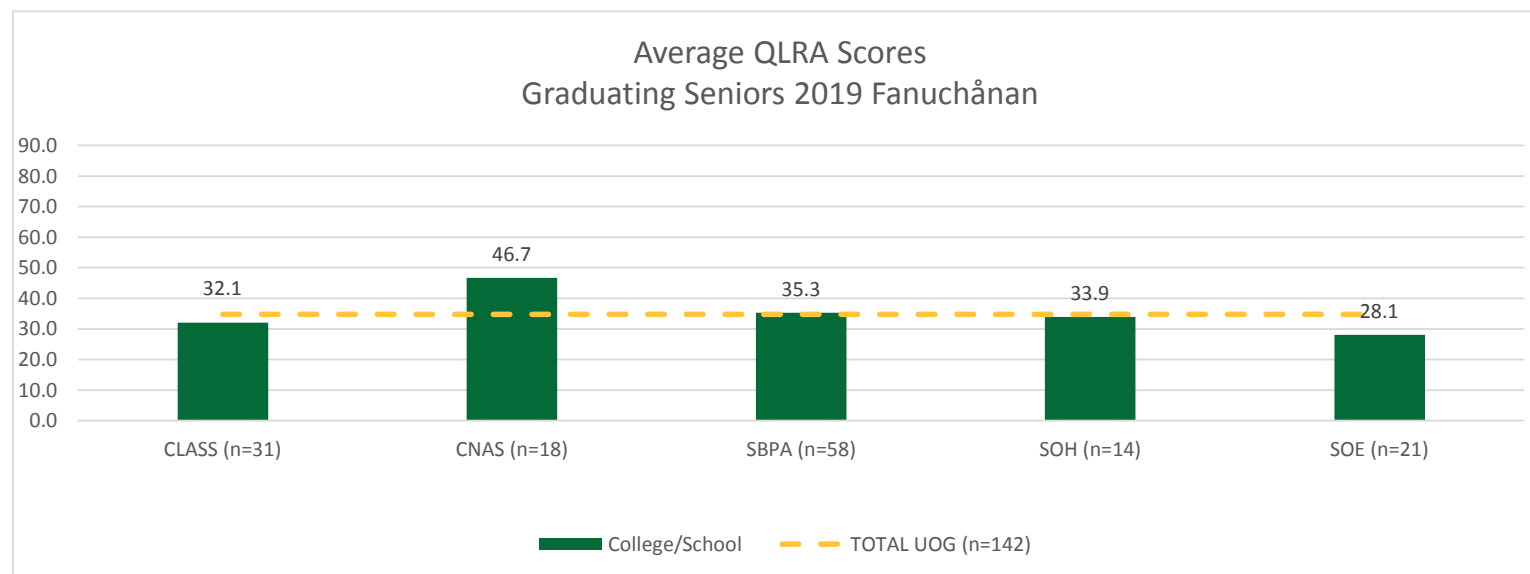


Higher Math Attitudes Scores correspond to more positive attitudes towards Math. The highest possible Math Attitude Score is 25.



2019 Fanuchånan Quantitative Literacy and Reasoning Assessment Average Scores by College

College/School	AVERAGE GRADE	STDEV
CLASS (n=31)	32.1	14.4
CNAS (n=18)	46.7	19.4
SBPA (n=58)	35.3	17.3
SOH (n=14)	33.9	16.0
SOE (n=21)	28.1	11.5
TOTAL UOG (n=142)	34.8	16.7

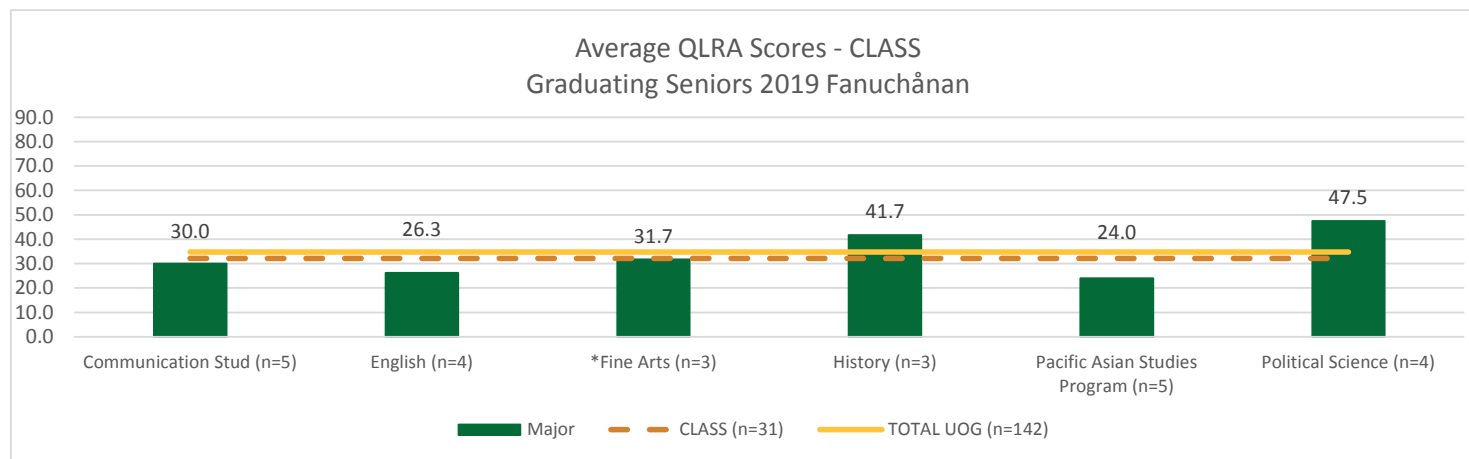


Average time spent on test: 33 minutes (55 minute time limit)



2019 Fanuchånan Quantitative Literacy and Reasoning Assessment Average Scores by Major - CLASS

MAJOR	AVERAGE GRADE	STDEV
Communication Stud (n=5)	30.0	3.5
English (n=4)	26.3	7.5
*Fine Arts (n=3)	31.7	10.4
History (n=3)	41.7	27.5
Pacific Asian Studies Program (n=5)	24.0	8.9
Political Science (n=4)	47.5	25.0
CLASS (n=31)	32.1	14.4
TOTAL UOG (n=142)	34.8	16.7



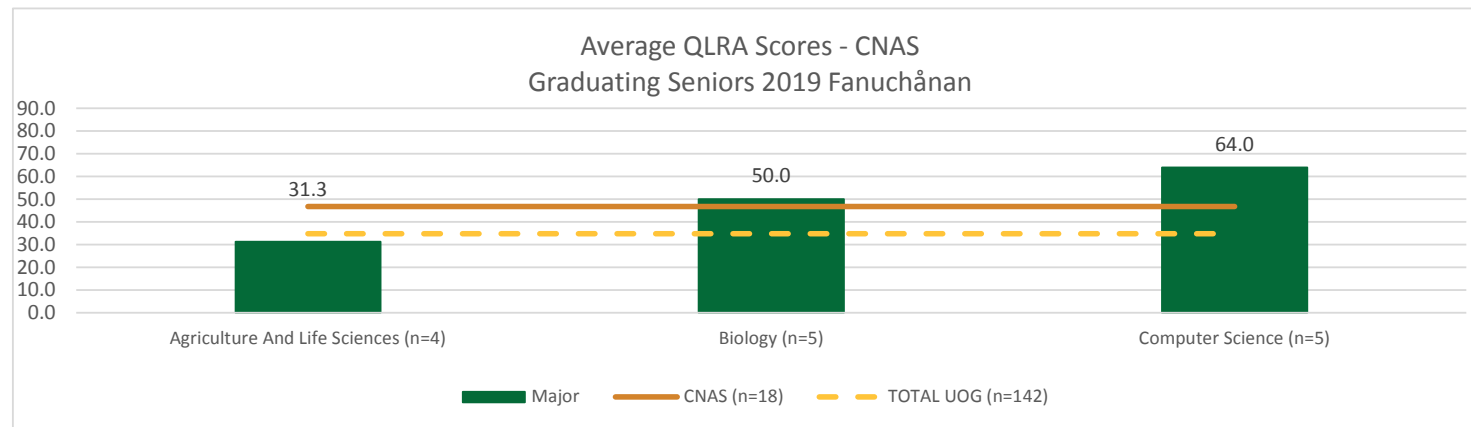
The following majors did not have enough data to report: Anthropology, Philosophy, Psychology, and Sociology

*The Fine Arts/Art, Fine Arts/Music, and Fine Arts/Theater programs are reported as "Fine Arts"



2019 Fanuchånan Quantitative Literacy and Reasoning Assessment Average Scores by Major - CNAS

MAJOR	AVERAGE GRADE	STDEV
Agriculture And Life Sciences (n=4)	31.3	16.5
Biology (n=5)	50.0	18.0
Computer Science (n=5)	64.0	15.6
CNAS (n=18)	46.7	19.4
TOTAL UOG (n=142)	34.8	16.7

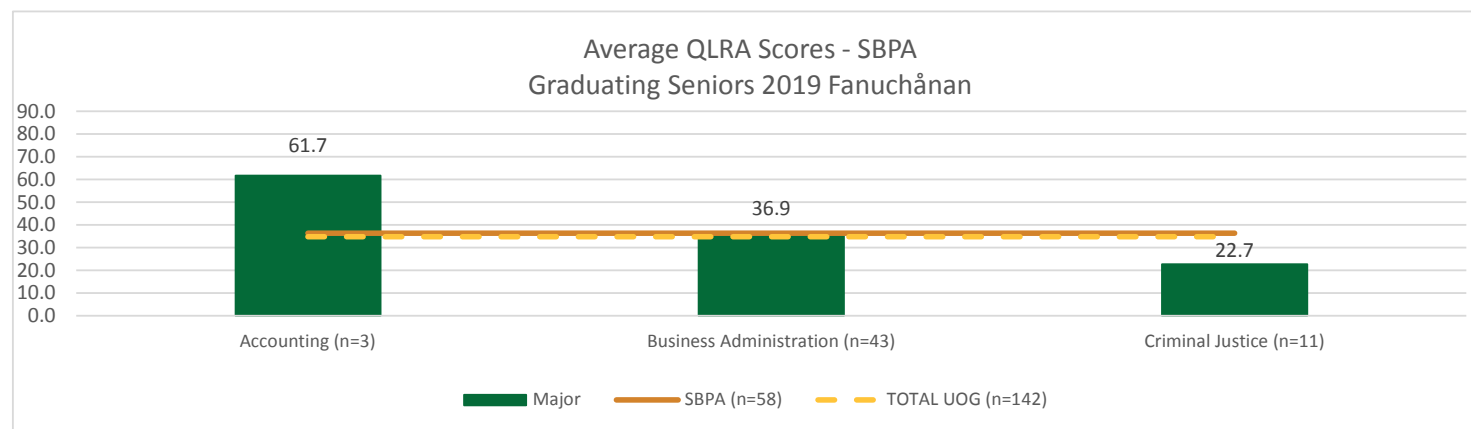


The following majors did not have enough data to report: Consumer & Family Sciences, Mathematics, and Tropical Agriculture-Applied



2019 Fanuchånan Quantitative Literacy and Reasoning Assessment Average Scores by Major - SBPA

MAJOR	AVERAGE GRADE	STDEV
Accounting (n=3)	61.7	22.5
Business Administration (n=43)	36.9	16.4
Criminal Justice (n=11)	22.7	8.2
SBPA (n=58)	35.3	17.3
TOTAL UOG (n=142)	34.8	16.7



The Public Administration program did not have enough students to report



2019 Fanuchånan Quantitative Literacy and Reasoning Assessment Average Scores by Major - SOH

MAJOR	AVERAGE GRADE	STDEV
Health Science (n=14)	33.9	16.0
SOH (n=14)	33.9	16.0
TOTAL UOG (n=142)	34.8	16.7

The Nursing program typically does not graduate students during the Fanuchånan (Fall) semesters

2019 Fanuchånan Quantitative Literacy and Reasoning Assessment Average Scores by Major - SOE

MAJOR	AVERAGE GRADE	STDEV
Elementary Education (n=12)	25.4	8.4
Secondary Education (n=7)	36.4	11.1
SOE (n=21)	28.1	11.5
TOTAL UOG (n=142)	34.8	16.7

The following majors did not have enough students to report: Early Childhood and Special Education