

SFU INSTITUTIONAL RESEARCH

MEMO

ATTENTION Senate	TEL	
FROM Zareen Naqvi, Director, Institutional Res	earch and Planning (IRP)	
RE IRP Report for Information		
DATE November 6, 2018	TIME	

At a meeting of Senate held on March 7, 2011, Senator Paul Percival requested that relevant IRP reports, such as the annual Grades Report, be brought to Senate for information.

Attached is the **2017/18 Grades Report**, submitted for information. This report is prepared once a year and it summarizes student course grades at the University over a ten year period. The 2017/18 Grades Report covers the period from 2008/09 to 2017/18. Attached is the Summary Report. More detailed information is available on IRP's website: <u>http://www.sfu.ca/irp/students/grades-report.html</u>

Enclosure



2017/18 Grades Report:

Historical Distribution of Undergraduate and Graduate Course Grades

2008/09 to 2017/18

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I – Introduction

This report summarizes student course grades at Simon Fraser University over the ten year period from 2008/09 to 2017/18¹. SFU faculty and staff can access more detailed information at the SFU Institutional Research and Planning website (<u>http://www.sfu.ca/irp/students/grades-report.html</u>).

II - Definitions and Notes

To calculate the average course grades, each grade is assigned a numeric value, defined in Table 1. These values are weighted by the number of students who received each particular grade, to produce an overall average.

Table 1: Simon Fraser University's (Grade Scale
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A+= 4.33	B+= 3.33	C+= 2.33	D = 1.00	N = 0.00
A = 4.00		C = 2.00		
A- = 3.67	B- = 2.67	C- = 1.67	FD = 0.00	

Note: FD is defined as a fail (academic discipline) and has only been in use since Summer 2009.

Table 2 lists the grades that have no numerical equivalent, and are therefore omitted from the calculation of average grades, and from this report. Although they are not included in the averages, credit is granted for the following grades: "AE", "CC", "CO", "CR", "P", and "S".

Table 2: Grades with No Numerical Equivalent

AEaegrotat standing, compassionate passAUauditCCcourse challengeCFcourse challenge failedCNdid not complete challengeCOcompleteCRcredit without gradeDEdeferred gradeFXformal exchangeGNgrade not reportedIPin progressPpass, ungradedSsatisfactoryUunsatisfactoryWwithdrawnWDwithdrawal	Grade	Definition
FXformal exchangeGNgrade not reportedIPin progressPpass, ungradedSsatisfactoryUunsatisfactoryWwithdrawn	AE AU CC CF CN CO CR	aegrotat standing, compassionate pass audit course challenge course challenge failed did not complete challenge complete credit without grade
WE withdrawal under extenuating circumstances	FX GN IP P S U W WD	formal exchange grade not reported in progress pass, ungraded satisfactory unsatisfactory withdrawn withdrawal

Among undergraduate courses, "lower division" courses are those numbered from XX1 to 299, inclusive. "Upper division" courses are numbered 300 to 499, inclusive.

^a Effective April 1, 2009, SFU introduced two new faculties: the Faculty of Communication, Art and Technology, and the Faculty of Environment. These changes in faculty structure initiated the move of certain courses to different faculties. Also, effective April 1, 2011, the Department of Archaeology moved from the Faculty of Arts and Social Sciences to the Faculty of Environment. Further, the Semester in Dialogue courses moved from the Faculty of Science to the Faculty of Environment in Spring 2017, and then moved to the Faculty of Arts and Social Sciences in Spring 2018. All data in this report reflect the current faculty structure.

Data reported on a yearly basis refers to fiscal year. For example, 2017/18 grades are the grades accumulated over the 2017 Summer term (SFU term code: 1174), the 2017 Fall term (SFU term code: 1177), and the 2018 Spring term (SFU term code: 1181). The grades data for each fiscal year are taken as of the middle of the following summer term, to allow time for grade challenges and deferred grades to be resolved.

To protect student privacy, grade distributions based on five grades or fewer are not reported. Co-op courses, work-terms, and practicums are excluded from this report. Where they could be identified, courses graded as Pass/Fail are also excluded.

III - Analysis

III.A – Undergraduate Course Grades

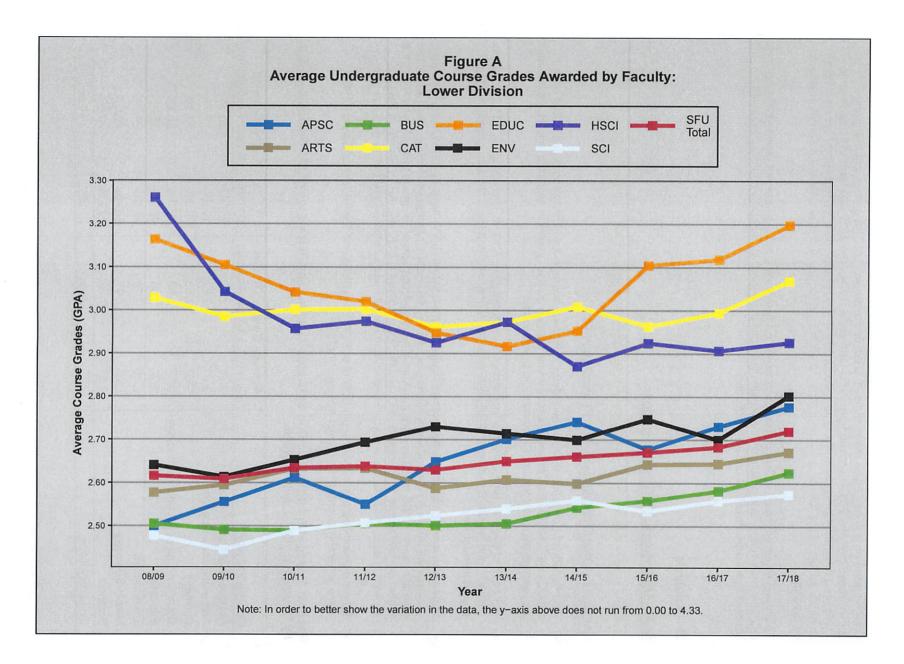
III.A.1 – Lower Division Course Grades (Courses Numbered XX1-299 Inclusive)

FACULTY COMPARISONS (see Table 3 and Figure A):

- The Faculty of Education (EDUC) awarded the highest average lower division grades in 2017/18. EDUC has awarded the highest average lower division course grades in six of the last ten years, with an average awarded grade of 3.06 over the past decade.
- For each of the past ten years, the faculties of Communication, Art and Technology (CAT), Education (EDUC), and Health Sciences (HSCI) have awarded higher average lower division grades than the rest of the faculties.
- In general, lower division courses in the Faculty of Environment (ENV) have awarded higher average
 grades than those in Arts and Social Sciences (ARTS) and Applied Sciences (APSC). For each of the
 past ten years, APSC courses have awarded a higher percentage of "A" grades (A+, A, and A-) and a
 higher percentage of "F" grades (F, FD, and N) than courses in ENV and ARTS. Average lower
 division grades in APSC have been increasing and have been similar to ENV for the past five years.
- Lower division courses in the Beedie School of Business (BUS) and the Faculty of Science (SCI) have generally awarded the lowest average grades.

Table 3: Average Undergraduate Course Grades Awarded and Percentage of "A" Grades Awarded, by Course Faculty – Lower Division

	Average	e Course Grades	% "A" Grades Awarded	
Course Faculty	2017/18	10-Year Average	2017/18	10-Year Proportion
Applied Sciences	2.78	2.66	28.3%	26.1%
Arts and Social Sciences	2.67	2.62	19.6%	17.7%
Business	2.62	2.53	15.6%	13.8%
Communication, Art and Technology	3.07	3.00	30.0%	28.2%
Education	3.20	3.06	42.1%	35.4%
Environment	2.80	2.70	26.0%	21.7%
Health Sciences	2.93	2.97	28.2%	29.6%
Science	2.57	2.52	22.2%	20.8%
University Total	2.72	2.65	23.0%	20.9%



LONG-TERM COMPARISONS AND TRENDS WITHIN FACULTIES²:

Comparing the average lower division grades awarded over the last ten years³:

- Applied Sciences (APSC):
 - Courses in Chinese (CHIN) have awarded the highest average lower division grades. Note that 2013/14 was the first year that this subject was offered by APSC.
 - Mathematics and Computing Science (MACM) courses have awarded grades considerably below the APSC average.
- Arts and Social Sciences (ARTS):
 - The seven subjects in the Faculty of Arts and Social Sciences to award the highest average grades in the last ten years are all language subjects (Language, Persian, Greek, Chinese, Arabic, Italian, and First Nations Languages). Note that several of these subjects have not been offered every year: Arabic (ARAB), First Nations Languages (FNLG), Language (LANG), and Persian (PERS). Furthermore, the averages for ARAB, LANG, and PERS are based on a relatively small number of grades.
 - Philosophy (PHIL) and Economics (ECON) courses have awarded the lowest average lower division grades.
- Business (BUS):
 - Over the last ten years, lower division courses in Business Administration and Economics (BUEC) and Business Administration (BUS) have awarded similar average grades.
- Communication, Art and Technology (CAT):
 - Publishing (PUB) and Contemporary Arts (CA) courses have awarded the highest lower division course grades over the last ten years. Note that this is only the sixth year that lower division PUB courses have been offered.
 - Communication (CMNS) course have awarded the lowest average lower division grades.
- Education (EDUC):
 - On average, Education (EDUC) courses have awarded higher lower division grades than Foundations of Academic Literacy (FAL) courses.
- Environment (ENV):
 - Courses in the Environment (ENV) subject have awarded the highest average lower division grades. Note that this is only the fifth year that lower division ENV courses have been offered.
 - Archaeology has awarded the lowest average lower division grades.
- Science (SCI):
 - Other than courses with the DATA and SCI subject codes (which awarded few grades each
 - year), the highest average lower division grades were awarded in Biomedical Physiology and Kinesiology (BPK) courses.
 - The lowest average lower division grades were awarded in Actuarial Mathematics (ACMA).

² Faculties with only one subject at the lower division level are not discussed in this section since there are no comparisons to make. ³ excluding subjects that awarded five or fewer grades in the most recent fiscal year, or awarded five or fewer grades in all previous fiscal years combined

CURRENT COMPARISONS AND TRENDS WITHIN FACULTIES2:

2017/18 Average Lower Division Course Grades:

- Applied Sciences (APSC):
 - The highest average lower division grades awarded in 2017/18 were in Chinese (CHIN) courses.
 - The lowest average lower division grades awarded in 2017/18 were in Mathematics and Computing Science (MACM) courses.
- Arts and Social Sciences (ARTS):
 - The highest average lower division grades awarded in 2017/18 were in Language (LANG). Note that this average is based on a relatively small number of grades.
 - The lowest average lower division grades awarded in 2017/18 were in Greek (GRK). However, this was due to an anomalous grading situation and this data should not be used for comparison purposes.
 - Aside from GRK, the lowest average lower division grades awarded in 2017/18 were in Economics (ECON).
- Business (BUS):
 - Business Administration (BUS) courses awarded higher average lower division grades than Business Administration and Economics (BUEC) courses in 2017/18.
- Communication, Art and Technology (CAT):
 - The highest average lower division grades awarded in 2017/18 were in Publishing (PUB) courses.
 - The lowest average lower division grades awarded in 2017/18 were in Interactive Arts and Technology (IAT).
- Education (EDUC):
 - In 2017/18, Education (EDUC) courses awarded higher average lower division grades than Foundations of Academic Literacy (FAL) courses.
- Environment (ENV):
 - The highest average lower division grades awarded in 2017/18 were in courses with the Environment (ENV) subject code.
 - The lowest average lower division grades were awarded in Environmental Science (EVSC) courses.
- Science (SCI):
 - Other than courses with the DATA and SCI subject codes (which awarded few grades in 2017/18), the highest average lower division grades in 2017/18 were awarded in Molecular Biology and Biochemistry (MBB).
 - The lowest average lower division grades in 2017/18 were awarded in Actuarial Mathematics (ACMA) and Mathematics and Computing Science (MACM). Note that the ACMA average is based on a relatively small number of grades.

Large Changes in 2016/17 to 2017/18 Average Lower Division Grades:

- The following subjects have seen large changes (of at least 0.25) in the average lower division grade awarded from last year to this year:
 - Increases: Spanish (SPAN: 2.92 to 3.45), Science (SCI: 3.76 to 4.09), and Hellenic Studies (HS: 2.61 to 2.89). Note that few grades were awarded in courses with the SCI subject code.
 - Decreases: Greek (GRK: 3.37 to 0.25). As stated previously, this unusually low 2017/18 average grade was due to an anomalous grading situation in GRK courses. As a result, this data should not be used for comparison purposes.

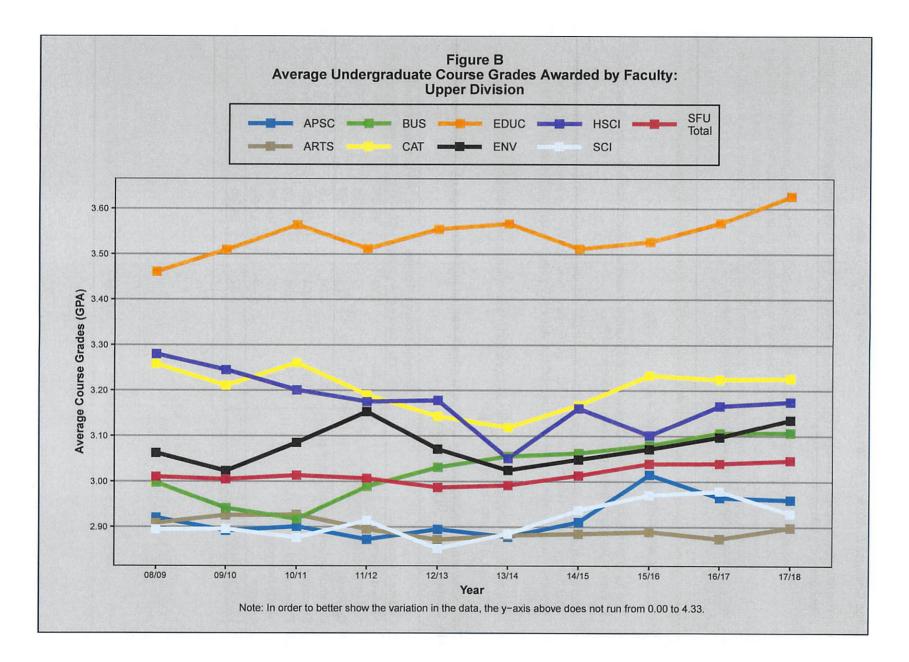
III.A.2 – Upper Division Course Grades (Courses Numbered 300-499 Inclusive)

FACULTY COMPARISONS (see Table 4 and Figure B):

- The Faculty of Education (EDUC) awarded the highest average upper division course grades in each of the last ten years (average grade awarded: 3.54).
- After Education, the Beedie School of Business (BUS) and the Faculties of Communication, Art and Technology (CAT), Health Sciences (HSCI), and Environment (ENV) have awarded the highest average upper division grades over the past ten years (10-year averages in the range of 3.03 to 3.20).
- The remaining faculties have consistently awarded lower average upper division grades (10-year averages in the range of 2.90 to 2.93).

Table 4: Average Undergraduate Course Grades Awarded and Percentage of "A" Grades Awarded, by Course Faculty – Upper Division

	Average Course Grades		% "A" Grades Awarded	
Course Faculty	2017/18	10-Year Average	2017/18	10-Year Proportion
Applied Sciences	2.96	2.93	33.3%	32.4%
Arts and Social Sciences	2.90	2.90	26.5%	27.0%
Business	3.11	3.03	31.9%	29.5%
Communication, Art and Technology	3.23	3.20	39.1%	38.4%
Education	3.63	3.54	68.6%	63.1%
Environment	3.14	3.08	39.2%	35.2%
Health Sciences	3.18	3.16	40.3%	37.4%
Science	2.93	2.92	32.5%	31.7%
University Total	3.05	3.02	34.2%	32.9%



LONG-TERM COMPARISONS AND TRENDS WITHIN FACULTIES4:

Comparing the average upper division grades awarded over the last ten years⁵:

- Applied Sciences (APSC):
 - Mechatronic Systems Engineering (MSE) courses have awarded the highest average upper division grades.
 - Computing Science (CMPT) courses have awarded the lowest average upper division grades.
- Arts and Social Sciences (ARTS):
 - The highest average upper division grades have been awarded in Dialogue (DIAL).
 - Business Administration and Economics (BUEC) courses have awarded average upper division grades considerably below the faculty average.
- Communication, Art and Technology (CAT):
 - Contemporary Arts (CA) courses have awarded the highest average upper division grades.
 - Publishing (PUB) courses have awarded the lowest average upper division grades. Note that this is based on only eight years of data.
- Environment (ENV):
 - Environmental Science (EVSC) courses have awarded the highest average upper division grades. Note that this is based on only five years of data, and very few grades were awarded in four of these years.
 - o Geography (GEOG) courses have awarded the lowest average upper division grades.
- Science (SCI):
 - The highest average upper division grades have been awarded in Marine Science (MASC).
 Note that MASC courses have generally awarded few upper division grades each year.
 - Mathematics and Computing Science (MACM) courses have awarded the lowest average upper division grades.

CURRENT COMPARISONS AND TRENDS WITHIN FACULTIES4:

2017/18 Average Upper Division Course Grades:

- Applied Sciences (APSC):
 - In 2017/18, Mechatronic Systems Engineering (MSE) courses awarded the highest average upper division grades, and Computing Science (CMPT) courses awarded the lowest.
- Arts and Social Sciences (ARTS):
 - The highest average upper division grades awarded in 2017/18 were in Spanish (SPAN). However, note that few grades were awarded in SPAN. Among the subjects which awarded at least 50 grades in 2017/18, Dialogue (DIAL) awarded the highest average upper division grades.
 - Business Administration and Economics (BUEC) courses awarded the lowest average upper division grades in 2017/18.

⁴ Faculties with only one subject at the upper division level are not discussed in this section since there are no comparisons to make. ⁵ excluding subjects that awarded five or fewer grades in the most recent fiscal year, or awarded five or fewer grades in all previous fiscal years combined

- Communication, Art and Technology (CAT):
 - The highest average upper division grades awarded in 2017/18 were in Contemporary Arts (CA).
 - The lowest average upper division grades awarded in 2017/18 were in Interactive Arts and Technology (IAT).
- Environment (ENV):
 - The highest average upper division grades awarded in 2017/18 were in Sustainable Development (SD).
 - The lowest average upper division grades awarded in 2017/18 were in Archaeology (ARCH).
- Science (SCI):
 - The subject awarding the highest average upper division grades in 2017/18 was Marine Science (MASC). However, note that few grades were awarded in MASC. Among the subjects which awarded at least 50 grades in 2017/18, Biomedical Physiology and Kinesiology (BPK) awarded the highest average upper division grades.
 - The lowest average upper division grades were awarded in courses with the Science (SCI) subject code.

Large Changes in 2016/17 to 2017/18 Average Upper Division Course Grades:

- The following subjects have seen large changes (of at least 0.25) in the average upper division grade awarded from last year to this year:
 - Increases: Cognitive Science (COGS: 3.17 to 3.67), Sustainable Development (SD: 3.15 to 3.59), and Asia-Canada (ASC: 2.76 to 3.10). Note that few grades were awarded in COGS.
 - Decreases: Italian (ITAL: 3.67 to 3.21), Science (SCI: 2.59 to 2.23), and Dialogue (DIAL: 3.92 to 3.66). Note that few grades were awarded in ITAL.

III.A.3 – General Observations (All Undergraduate Courses)

- In 2017/18, the average undergraduate grade awarded was 2.86.
- The average undergraduate grade awarded over the past ten years is 2.80.
- Over the past ten years, upper division courses have consistently awarded higher average grades than lower division courses in all faculties.

III.B – Undergraduate Course Grades by Student Faculty (see Table 5 and Figure C)

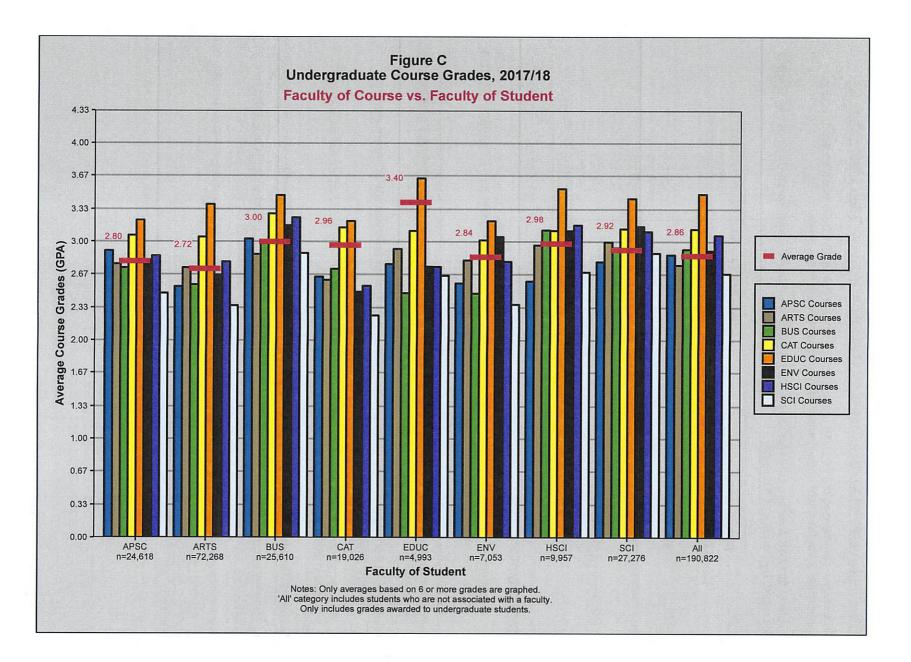
This section summarizes the 2017/18 undergraduate course grade distributions within each faculty, controlling for the faculty of undergraduate students enrolled in the courses.

Table 5: 2017/18 Average Undergraduate Course Grades Awarded and Percentage of "A" Grades Awarded, by Faculty of Student

Faculty of Student	Average Course Grades	% "A" Grades Awarded	
Applied Sciences	2.80	28.1%	
Arts and Social Sciences	2.72	22.0%	
Business	3.00	29.6%	
Communication, Art and Technology	2.96	30.1%	
Education	3.40	56.3%	
Environment	2.84	27.5%	
Health Sciences	2.98	32.6%	
Science	2.92	32.3%	
All Undergraduate Students	2.86	27.8%	

By Faculty of Students:

- Students from the Faculty of Education (EDUC) were awarded the highest grades overall in 2017/18, with an average course grade of 3.40.
- Students from the Beedie School of Business (BUS) and the Faculties of Health Sciences (HSCI), Communication, Art and Technology (CAT), and Science (SCI) were awarded average grades from 2.92 to 3.00.
- Students from the Faculties of Environment (ENV) and Applied Sciences (APSC) were awarded average grades of 2.84 and 2.80, respectively.
- Students from the Faculty of Arts and Social Sciences (ARTS) were awarded the lowest average grades in 2017/18, with an average course grade of 2.72.
- Students from all faculties most frequently took courses from their own faculties.
- Students from all faculties achieved their highest average grades in courses taught in Education (EDUC).



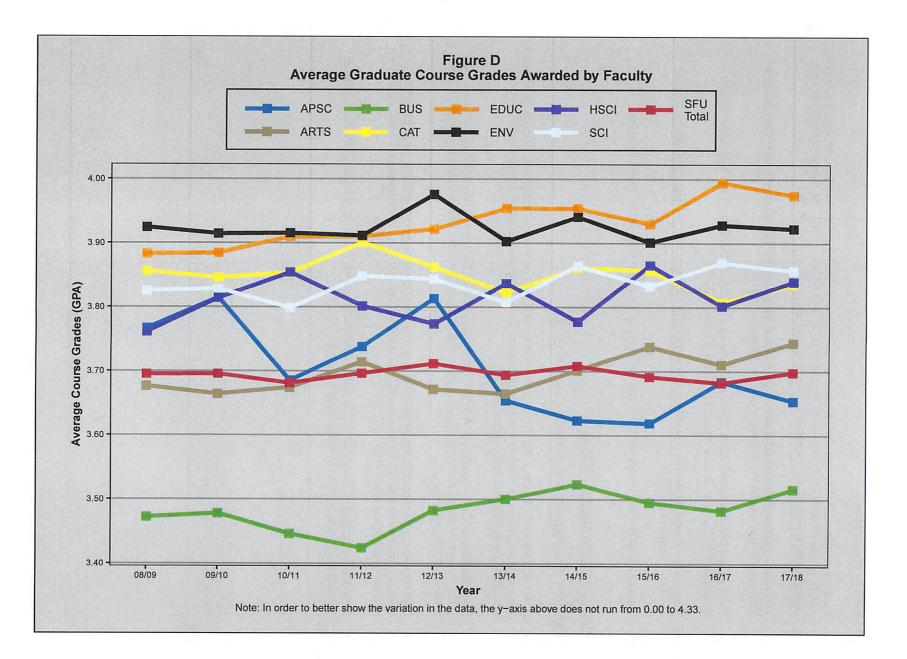
By Faculty of Courses:

- In courses offered by the Faculties of Applied Sciences (APSC), Communication, Art and Technology (CAT), Environment (ENV), Health Sciences (HSCI), and Science (SCI), students from the Beedie School of Business (BUS) received the highest average grades in 2017/18.
- In courses offered by the Faculty of Arts and Social Sciences (ARTS), students from the Faculty of Science (SCI) received the highest average grades in 2017/18.
- In courses offered by the Beedie School of Business (BUS), students from the Faculty of Health Sciences (HSCI) received the highest average grades in 2017/18.
- In courses offered by the Faculty of Education (EDUC), students from EDUC received the highest average grades in 2017/18.
- Courses in all faculties were most frequently taken by students from within those faculties.

III.C – Graduate Course Grades

FACULTY COMPARISONS (see Table 6 and Figure D):

- The Faculties of Education (EDUC) and Environment (ENV) awarded the highest average graduate level course grades for each of the past ten years. The 10-year average grades awarded for EDUC and ENV were 3.93 and 3.92, respectively.
- The Faculties of Communication, Art and Technology (CAT), Science (SCI), and Health Sciences (HSCI) have awarded similar average grades over the past decade, with 10-year averages of 3.85, 3.84, and 3.81, respectively.
- The Faculties of Applied Sciences (APSC) and Arts and Social Sciences (ARTS) have generally awarded lower average graduate grades than all other faculties except Business (10-year averages of 3.69 and 3.70, respectively).
- The Beedie School of Business (BUS) has awarded the lowest average graduate grades in each of the last ten years, with an average grade awarded of 3.48.



	Average	ge Course Grades % "A" Grades Awa		Grades Awarded
Course Faculty	2017/18	10-Year Average	2017/18	10-Year Proportion
Applied Sciences	3.65	3.69	72.0%	74.1%
Arts and Social Sciences	3.74	3.70	78.9%	75.1%
Business	3.52	3.48	51.0%	49.0%
Communication, Art and Technology	3.84	3.85	88.6%	87.4%
Education	3.97	3.93	95.1%	92.0%
Environment	3.92	3.92	92.2%	93.9%
Health Sciences	3.84	3.81	88.1%	85.6%
Science	3.86	3.84	84.9%	84.3%
University Total	3.70	3.70	71.0%	71.5%

Table 6: Average Graduate Course Grades Awarded and Percentage of "A" Grades Awarded, by Course Faculty

LONG-TERM COMPARISONS AND TRENDS WITHIN FACULTIES⁶:

Comparing the average graduate course grades awarded over the last ten years7:

- Applied Sciences (APSC):
 - Mechatronic Systems Engineering (MSE) has awarded the highest average graduate course grades.
 - o Computing Science (CMPT) has awarded the lowest average graduate grades.
- Arts and Social Sciences (ARTS):
 - Psychology (PSYC) has awarded the highest average graduate grades over the past decade.
 - o Applied Legal Studies (ALS) has awarded the lowest average graduate grades.
- Communication, Art and Technology (CAT):
 - o Graduate level courses in all CAT subjects awarded similar average grades.
- Environment (ENV):
 - o Graduate level courses in all ENV subjects awarded similar average grades.
- Science (SCI):
 - Marine Science (MASC) awarded the highest average graduate course grades, but this average is based on very few grades. Excluding MASC, the highest average graduate grades in the Faculty of Science were awarded in Biological Sciences (BISC) courses.
 - o Physics (PHYS) has awarded the lowest average graduate grades.

⁶ Faculties with only one subject at the graduate level are not discussed in this section, since there are no comparisons to make. ⁷ excluding subjects that awarded five or fewer grades in the most recent fiscal year, or awarded five or fewer grades in all previous fiscal years combined

CURRENT COMPARISONS AND TRENDS WITHIN FACULTIES6:

2017/18 Average Course Grades:

- Applied Sciences (APSC):
 - In 2017/18, Computing Science (CMPT) awarded the highest average graduate course grades.
 - Mechatronic Systems Engineering (MSE) awarded the lowest average graduate course grades.
- Arts and Social Sciences (ARTS):
 - The highest average graduate grades in 2017/18 were awarded in Psychology (PSYC).
 - Humanities (HUM) awarded the lowest average graduate course grades in 2017/18, but this
 is due to the fact that some graduate HUM course grades were submitted later than usual
 this year. Therefore, when the grades data were assembled in mid-summer, an unusually
 high percentage of graduate HUM course grades were still "N", which counts as 0 in GPA
 calculations. Excluding HUM, the lowest average graduate course grades were awarded in
 Applied Legal Studies (ALS).
- Communication, Art and Technology (CAT):
 - The highest average graduate grades in 2017/18 were awarded in Publishing (PUB).
 - Courses in Communication (CMNS) and Interactive Arts and Technology (IAT) awarded the lowest average graduate grades.
- Environment (ENV):
 - In 2017/18, courses in Ecological Restoration (ECO) awarded the highest average graduate grades.
 - Among courses with at least 50 grades awarded in 2017/18, the lowest average graduate grades were awarded in Archaeology (ARCH).
- Science (SCI):
 - Among courses with at least 50 grades awarded in 2017/18, Molecular Biology and Biochemistry (MBB) awarded the highest average graduate grades.
 - Among courses with at least 50 grades awarded in 2017/18, the lowest average graduate grades were awarded in Physics (PHYS).

Large changes in 2016/17 to 2017/18 Average Graduate Course Grades:

- The following subjects have seen large changes (of at least 0.25) in the average graduate course grade awarded from last year to this year:
 - Increases: History (HIST: 3.23 to 3.94), Physics (PHYS: 3.34 to 3.68), and Philosophy (PHIL: 3.45 to 3.72). Note that few grades were awarded in HIST courses.
 - Decreases: Applied Mathematics (APMA: 4.01 to 3.66) and Mechatronic Systems Engineering (MSE: 3.84 to 3.53). Note that few grades were awarded in APMA courses.

GENERAL OBSERVATIONS:

- In 2017/18, the average graduate grade awarded was 3.70, which is similar to last year. The average
 graduate grade awarded at the university has been fairly stable over the last ten years.
- The average graduate grade awarded over the past ten years is 3.70.