

This is a school-by-school study based on final marks in December 2005 for the various UBC first year calculus courses for students who graduated from BC schools in 2004/05. There is also a comparison with results for students from Alberta, Ontario, China and USA. The Term I UBC calculus courses include:

MATHEMATICS 100 (3 credits): Differential Calculus with Applications to Physical Sciences and Engineering (prerequisites: *High school calculus*, at least C+ in Principles of Math 12).

MATHEMATICS 102 (3): Differential Calculus with Applications to Life Sciences (prerequisites: *High school calculus*, at least C+ in Principles of Math 12).

MATHEMATICS 104 (3): Differential Calculus with Applications to Commerce and Social Sciences (prerequisites: *High school calculus*, at least C+ in Principles of Math 12).

MATHEMATICS 120 (4): (Honours) Differential Calculus. (Invitation based on excellence on the Euclid Contest or Principles of Mathematics 12 Scholarship result.)

MATHEMATICS 180 (4): Differential Calculus with Physical Applications (prerequisite: at least C+ in Principles of Math 12). *Not for credit for those with high school calculus. Same final exam as Mathematics 100.*

MATHEMATICS 184 (4): Differential Calculus for Social Science and Commerce (prerequisite: at least C+ in Principles of Math 12). *Not for credit for those with high school calculus. Same final exam as Mathematics 104.*

Table of Results in Dec 2005 compares performances for each course. For the students of each course the average Principles of Math 12 and UBC course marks are given.

Table A compares schools by region and type. B.C. schools identified by region include only public schools.

The school-by-school Tables (I, II) include all schools with at least 10 students in UBC calculus classes in the Fall of 2005.

The "ranking" in each category is determined by equally weighting results in the categories of % passing, % with A standing, and the change of students' average marks in Principles of Math 12 to UBC Math courses.

KUDOS:

JN Burnett (Richmond) has ranked in the top third for **six** consecutive years (2000-2005)!!!!!!

University Hill and **Eric Hamber** (Vancouver west) have ranked in the top third for **four** consecutive years (2002-2005)!!!!

Sentinel (West Vancouver), **Richmond** (Richmond), **Windsor** (North Vancouver) and **Burnaby Mountain** (Burnaby) have ranked in the top third for **two** consecutive years (2004-2005)!!

Lord Byng and **Sir Winston Churchill** (Vancouver west), **Templeton**, **Killarney** and **King George** (Vancouver east), **Hugh Boyd** and **Steveston** (Richmond), **Handsworth** and **Argyle** (North Vancouver), **Terry Fox**, **Port Moody** and **Pinetree** (Coquitlam), **St. Thomas Aquinas** (Catholic), **Moscrop** and **Alpha** (Burnaby) and **West Vancouver** (West Vancouver) ranked in the top third in 2005!

COMMENTS

*Over the past five years, the relative performances of the following regions and types should be noted (BC regions only include students from public schools):

Very Good: West Vancouver, Ontario, Alberta
Good: Vancouver west, Richmond, North Vancouver

*Over the past five years, the relative performances of the following schools should be noted (each school had at least 10 students in UBC calculus classes in each of the past five years):

Excellent: JN Burnett (Richmond)

Very Good: University Hill (Vancouver west), Carson Graham (North Vancouver), Hugh McRoberts (Richmond), Sentinel (West Vancouver)

Good: Eric Hamber, Magee and Kitsilano (Vancouver west), David Thompson, Sir Charles Tupper and Killarney (Vancouver east), Terry Fox (Coquitlam), Richmond and RC Palmer (Richmond), Handsworth (North Vancouver)

*Independent schools (excludes Catholic schools) continue to do much worse than public schools

*Students with a high school calculus course continue to do much better than students who had not taken a high school calculus course. In fact, the gap between these groups of students has widened significantly.

*The average Grade 12 Math mark of 90% is the highest ever!

TABLE OF RESULTS IN DEC 2005

(only includes students from the graduating classes of BC high schools)

(2004 results in brackets)

Math Course	Number of students taking course	Percentage with A standing	Percentage passing	Average school mark → Average UBC mark
100	662 (839)	40 (37)	95 (93)	91→74 (91→73)
102	395 (351)	31 (27)	94 (86)	92→72 (91→68)
104	429 (473)	28 (31)	86 (90)	89→66 (89→69)
120	32 (43)	72 (60)	97 (98)	95→82 (96→79)
180	362 (460)	12 (18)	79 (76)	88→59 (87→62)
184	357 (469)	6 (11)	76 (74)	86→54 (86→59)
ALL	2237 (2649)	27 (27)	87 (85)	90→66 (89→68)

Table A
2005 COMPARISON BY SCHOOL REGION AND TYPE

(2004 results in brackets)

School Type or Region "ranking"	No. of students in UBC courses	Percentage Passing	Percentage with A standing	Avg. school mark → Avg. UBC mark	Percentage with HS Calculus
1. Alberta (4)	63 (84)	98 (89)	38 (32)	91→74 (88→68)	89

2. West Vancouver (5)	75 (76)	93 (88)	31 (39)	89→69 (89→70)	76
3. North Vancouver (9)	91 (100)	92 (82)	29 (33)	88→69 (89→68)	71
4. Vancouver west (3)	319 (362)	91 (88)	30 (29)	89→68 (87→69)	64
5. Richmond (2)	274 (331)	89 (89)	31 (34)	90→69 (89→69)	63
6. Burnaby (7)	176 (209)	89 (87)	30 (33)	90→68 (91→69)	65
7. China	49	84	53	90→70	67
8. Coquitlam (11)	160 (200)	89 (87)	29 (26)	92→69 (92→66)	66
9. Nanaimo	26	96	23	90→65	73
10. Vancouver east (8)	255 (268)	86 (85)	26 (29)	90→67 (88→67)	57
11. Ontario (1)	70 (94)	86 (88)	21 (34)	87→64 (86→67)	96
12. Vancouver Island (10)	74 (70)	89 (89)	22 (23)	90→64 (89→66)	64
13. Catholic (12)	109 (92)	87 (87)	21 (12)	90→65 (89→64)	72
14. BC Interior (15)	86 (124)	85 (81)	24 (22)	90→65 (90→63)	76
15. Abbotsford	23	91	17	90→61	48
16. Surrey (13)	190 (194)	85 (84)	24 (22)	91→65 (91→65)	72
17. Delta (6)	84 (83)	85 (89)	18 (28)	89→64 (91→71)	75
18. USA	66	74	9	80→57	73
19. Langley (16)	21 (43)	86 (79)	10 (12)	90→62 (91→61)	33
20. Independent (14)	119 (128)	79 (82)	16 (19)	88→62 (88→65)	72
21. Victoria	20	75	20	89→61	65

Table I
VANCOUVER SCHOOLS
2005 TABLE OF SCHOOL-BY-SCHOOL RESULTS (2004 results in brackets)

School "ranking"	No. of students in UBC courses	Percentage Passing	Percentage with A standing	Avg. school mark→ Avg. UBC mark	Percentage with HS calculus
1. Lord Byng (17)	29 (13)	100 (85)	45 (23)	92→75 (90→66)	83 (57)
2. University Hill (1)	23 (18)	100 (100)	39 (39)	92→75 (91→77)	87 (88)
3. Templeton	14	100	36	90→72	36
4. Eric Hamber (4)	54 (66)	91 (86)	35 (39)	89→69 (87→71)	78 (64)
5. Killarney (12)	56 (45)	93 (87)	32 (31)	91→71 (89→69)	73 (33)
6. King George	10	80	60	93→76 (91→80)	80
7. Sir W. Churchill (8)	54 (96)	89 (88)	28 (27)	87→68 (85→68)	50 (44)
8. David Thompson (11)	47 (49)	91 (88)	24 (30)	88→67 (89→69)	53 (52)
9. Magee (7)	51 (27)	88 (93)	33 (26)	89→66 (90→71)	57 (56)

10. Prince of Wales (18)	47 (69)	91 (81)	26 (22)	88→66 (87→64)	60 (52)
11. Kitsilano (3)	21 (27)	86 (96)	24 (33)	89→69 (89→73)	62 (70)
12. Little Flower Acad (15)	27 (30)	85 (93)	30 (20)	90→67 (90→67)	74 (83)
13. Gladstone (14)	27 (31)	78 (87)	22 (26)	87→65 (86→66)	59 (74)
14. St. Patrick's	12	75	33	89→63	67
15. Point Grey (15)	38 (45)	89 (84)	16 (24)	87→61 (86→68)	58 (64)
16. Sir Charles Tupper (2)	11 (14)	82 (100)	18 (36)	88→64 (88→71)	55 (64)
17. John Oliver (9)	14 (11)	79 (91)	21 (18)	85→60 (83→70)	43 (67)
18. Windermere (5)	25 (24)	76 (88)	20 (38)	88→63 (88→70)	44 (46)
19. Vancouver College (21)	26 (22)	89 (78)	4 (5)	88→61 (86→56)	85 (77)
20. St. George's (19)	12 (16)	83 (81)	8 (25)	84→58 (88→62)	75 (81)
21. Vancouver Tech (6)	35 (29)	77 (90)	8 (31)	88→62 (88→70)	60 (45)
22. York House (13)	11 (11)	55 (91)	9 (9)	81→53 (86→69)	73 (64)
23. West Pt Grey Academy	10	80	0	89→57	50

Table II
BC SCHOOLS OUTSIDE VANCOUVER
2005 TABLE OF SCHOOL-BY-SCHOOL RESULTS

(2004 results in brackets)

School "ranking"	No. of students in UBC courses	Percentage Passing	Percentage with A standing	Avg. school mark→ Avg. UBC mark	Percentage with HS calculus
1. Hugh Boyd (35)	10 (14)	100 (79)	60 (47)	92→76 (88→60)	40 (50)
2. Handsworth (38)	25 (24)	96 (75)	52 (25)	91→76 (89→66)	80 (63)
3. Richmond (2)	34 (75)	94 (92)	41 (41)	88→72 (87→73)	79 (83)
4. Terry Fox (31)	13 (17)	100 (76)	46 (29)	95→75 (93→68)	77 (71)
5. Burnaby Mountain (4)	15 (21)	100 (95)	33 (42)	91→73 (94→75)	93 (81)
6. St. Thomas Aquinas	11	100	36	91→71	55
7. West Vancouver (22)	32 (33)	100 (82)	31 (36)	88→70 (88→66)	72 (42)
8. JN Burnett (11)	52 (52)	94 (88)	33 (56)	90→72 (91→72)	79 (90)
9. Moscrop (24)	13 (23)	92 (96)	31 (13)	84→65 (90→65)	62 (66)
10. Argyle (26)	17 (24)	100 (75)	24 (33)	90→71 (88→65)	71 (40)
11. Steveston (41)	36 (26)	92 (85)	33 (8)	92→69 (88→58)	53 (46)
12. Port Moody (18)	35 (55)	91 (95)	31 (29)	91→70 (92→70)	66 (68)
13. Pinetree (38)	41 (35)	95 (80)	29 (20)	93→70 (91→64)	68 (58)
14. Windsor (8)	12 (17)	92 (88)	17 (41)	86→68 (87→70)	92 (67)
15. Sentinel (13)	17 (33)	82 (85)	41 (42)	89→68 (90→73)	88 (85)

16. Alpha (27)	15 (19)	87 (83)	33 (26)	89→68 (87→63)	67 (90)
17. RC Palmer (9)	18 (31)	94 (90)	17 (39)	88→68 (89→72)	44 (42)
18. Fleetwood Park (46)	11 (14)	91 (86)	27 (0)	90→69 (89→57)	82 (46)
19. Centennial (43)	35 (41)	89 (78)	31 (15)	91→69 (91→60)	71 (49)
20. Robert McMath (20)	31 (25)	87 (92)	32 (28)	91→70 (89→68)	32 (32)
21. Hugh McRoberts (3)	21 (29)	90 (93)	29 (45)	89→67 (91→73)	57 (62)
22. New Westminster (40)	11 (20)	91 (85)	18 (10)	89→69 (90→62)	91 (60)
23. Rockridge (5)	26 (10)	92 (90)	23 (40)	90→67 (85→71)	73 (80)
24. Dover Bay	10	90	30	92→68	50
25. Seaquam (6)	25 (27)	80 (92)	36 (41)	90→66 (93→74)	76 (89)
26. Burnaby North (14)	42 (55)	83 (91)	33 (41)	92→68 (93→73)	74 (85)
27. Semiahmoo (19)	39 (30)	82 (93)	31 (27)	90→66 (91→40)	79 (67)
28. Burnaby Central (23)	35 (31)	91 (84)	26 (39)	92→66 (93→68)	51 (77)
29. Elgin Park (44)	19 (13)	89 (77)	21 (8)	91→67 (90→62)	68 (69)
30. Fraser Heights	25	80	36	91→65	80
31. Carson Graham (1)	17 (17)	76 (94)	29 (47)	87→64 (91→74)	65 (72)
32. Matthew McNair (28)	23 (15)	83 (87)	26 (20)	89→64 (89→65)	78 (87)
33. Burnaby South (30)	49 (49)	88 (84)	27 (22)	90→63 (91→66)	61 (68)
34. Seycove	11	91	9	86→60	36
35. North Delta (16)	26 (29)	85 (96)	12 (17)	87→64 (87→70)	69 (79)
36. St. Thomas More	12	92	8	92→66	75
37. South Delta (17)	16 (11)	88 (91)	19 (36)	90→64 (92→72)	100 (100)
38. Riverside (25)	15 (17)	73 (94)	33 (18)	92→66 (92→67)	53 (65)
39. Charles London (37)	33 (34)	79 (82)	24 (18)	89→65 (89→63)	79 (69)
40. HJ Cambie (21)	16 (25)	81 (100)	25 (20)	90→63 (92→70)	63 (52)
41. Gleneagle (10)	14 (19)	86 (95)	14 (37)	90→64 (92→72)	64 (95)
42. Princess Margaret (32)	19 (16)	89 (81)	11 (25)	91→63 (90→65)	74 (38)
43. St. Michaels	16	81	19	90→64	94
44. Delta (42)	17 (16)	88 (69)	0 (19)	90→62 (92→66)	59 (44)
45. Johnston Heights (12)	10 (19)	80 (89)	20 (42)	90→62 (93→74)	90 (85)
46. Enver Creek (29)	14 (24)	71 (92)	7 (8)	91→52 (90→65)	36 (21)