

# Bachelor's Results by Course Department

2019/20 – 2023/24

19 November 2024

## Mathematics (MA) courses: 2019/20 – 2023/24

A summary of mark and grade outcomes for Bachelor's students on Mathematics (MA) courses over the last 5 years, 2019-20 to 2023-24. Results for students at other levels of study or non-award programmes are *excluded*.

Grades for LLB students' on courses outside Law are mapped to the BA/BSc classification scheme ([link](#)). Grades for BA/BSc students taking Law courses are mapped to the LLB classification scheme ([link](#)) appropriate to the course level.

Absent and Incomplete grades are *counted*, while the related zero marks are *excluded* from mark aggregates. Resit results are *included*, with marks after resit and capped Pass grades. Deferrals are *excluded* except for resits where the first sitting mark and grade stand.

For each course, **Histograms** summarise the Agreed marks from the *most recent* year; **Barcharts** present the outcomes in grades, for all Bachelor's course grades in the Department in 2023/24, and each course over recent years. **Box-plots** simplify the distribution into quartiles, divided by the median, with width proportional to the number of results. Cumulative distribution (**ecdf**) plots indicate the proportion of results up to a given mark, or mark for a given percentile.

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## Mathematics (MA) course results

### By Academic Year, 2019/20 – 2023/24

Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	2496	70.2	17.3	0	48.0	59.0	71.0	25.0	84.0	92.0	95.0	100
2020/21	2647	69.0	16.4	0	47.0	59.0	71.0	22.0	81.0	88.0	91.0	100
2021/22	2256	60.8	19.9	0	35.0	48.0	63.0	29.0	77.0	85.0	88.0	99
2022/23	2649	59.6	19.3	0	36.0	47.0	60.0	27.0	74.0	84.0	90.0	100
2023/24	2643	60.3	17.9	0	40.0	49.0	62.0	24.0	73.0	82.0	87.0	99

Marks by Year – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	2525	29	79	153	191	292	468	1313		1.1	3.1	6.1	7.6	11.6	18.5	52.0
2020/21	2668	21	90	64	200	351	532	1410		0.8	3.4	2.4	7.5	13.2	19.9	52.8
2021/22	2307	51	270	102	311	353	351	869		2.2	11.7	4.4	13.5	15.3	15.2	37.7
2022/23	2702	53	296	177	384	441	497	854		2.0	11.0	6.6	14.2	16.3	18.4	31.6
2023/24	2698	55	228	178	341	446	586	864		2.0	8.5	6.6	12.6	16.5	21.7	32.0

Grades by Year – Count and Percentage distribution (%).

### By Level in 2023/24

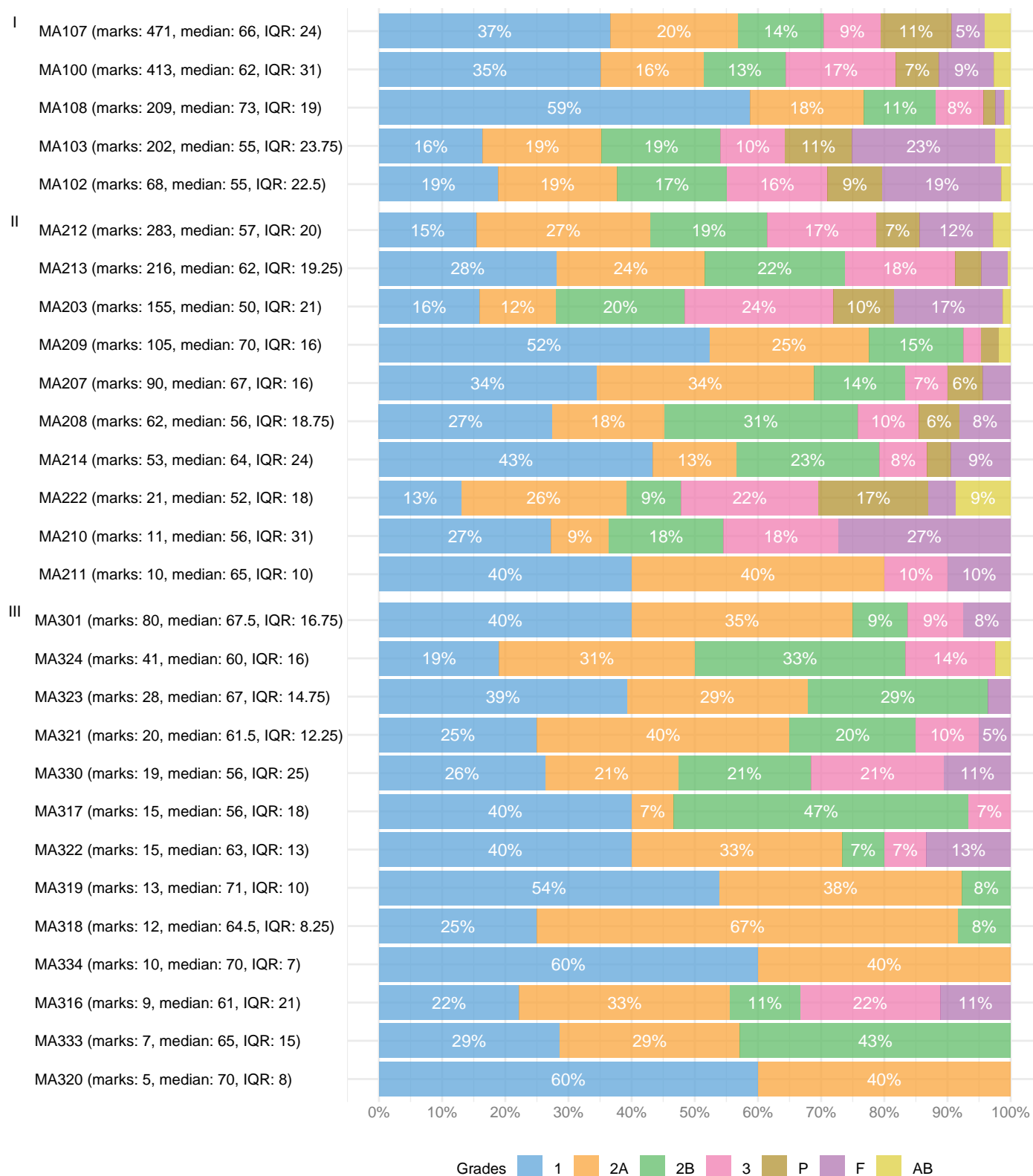
Level	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
I	1363	61.1	19.3	0	40.0	49.0	63.0	27.0	76.0	84.0	88.0	99
II	1006	58.6	16.6	0	40.0	48.0	60.0	22.0	70.0	79.0	84.0	97
III	274	62.9	15.1	0	46.0	55.0	65.0	17.0	72.0	78.0	85.0	99

2023/24 Marks by Level – Mean, Standard deviation and Quantiles.

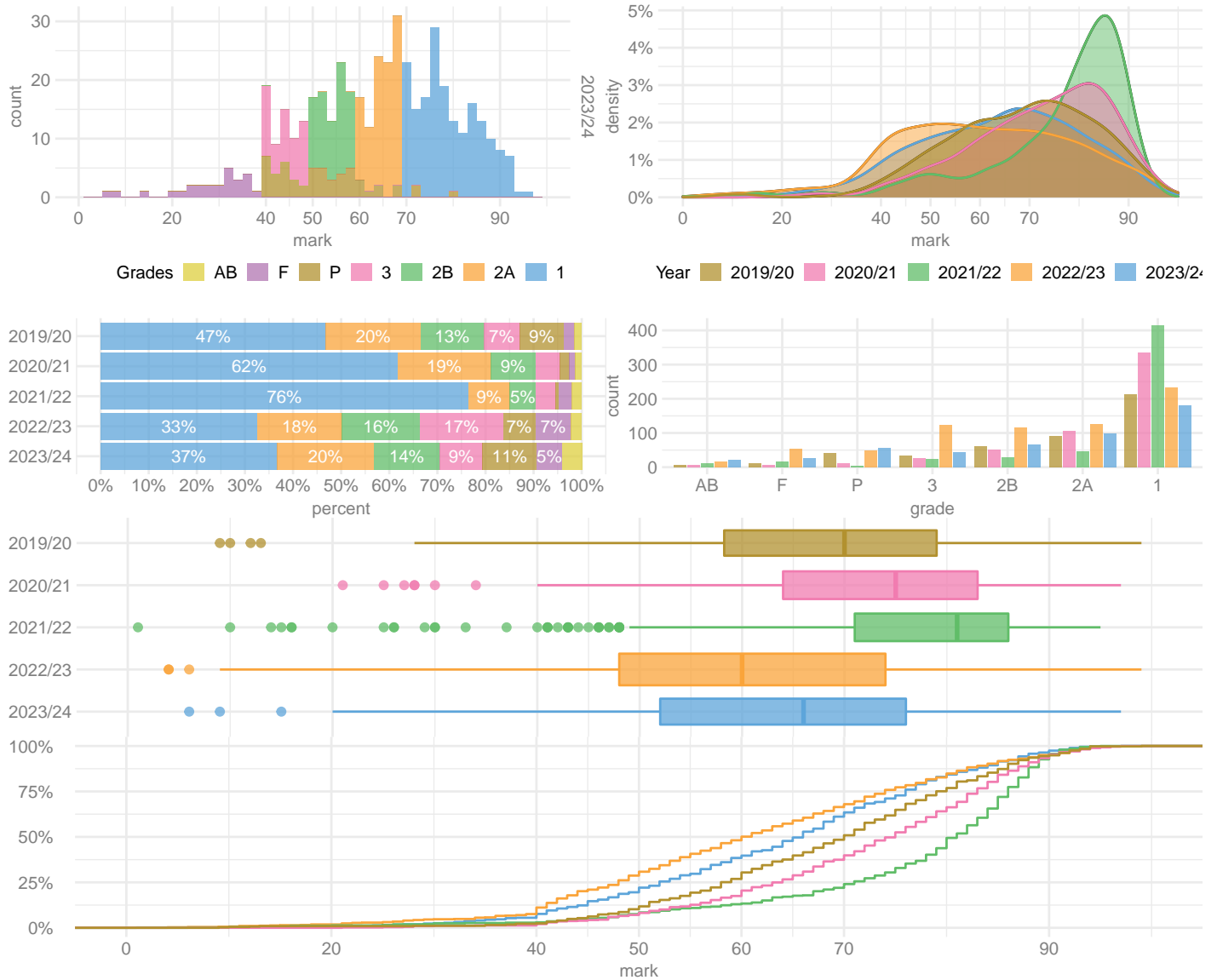
Level	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
I	1402	39	126	116	166	197	258	500		2.8	9.0	8.3	11.8	14.1	18.4	35.7
II	1021	15	89	62	152	198	237	268		1.5	8.7	6.1	14.9	19.4	23.2	26.2
III	275	1	13		23	51	91	96		0.4	4.7		8.4	18.5	33.1	34.9

2023/24 Grades by Level – Count and Percentage distribution (%).

Mathematics (MA) course results by Level in 2023/24



## MA107: Quantitative Methods (Mathematics)



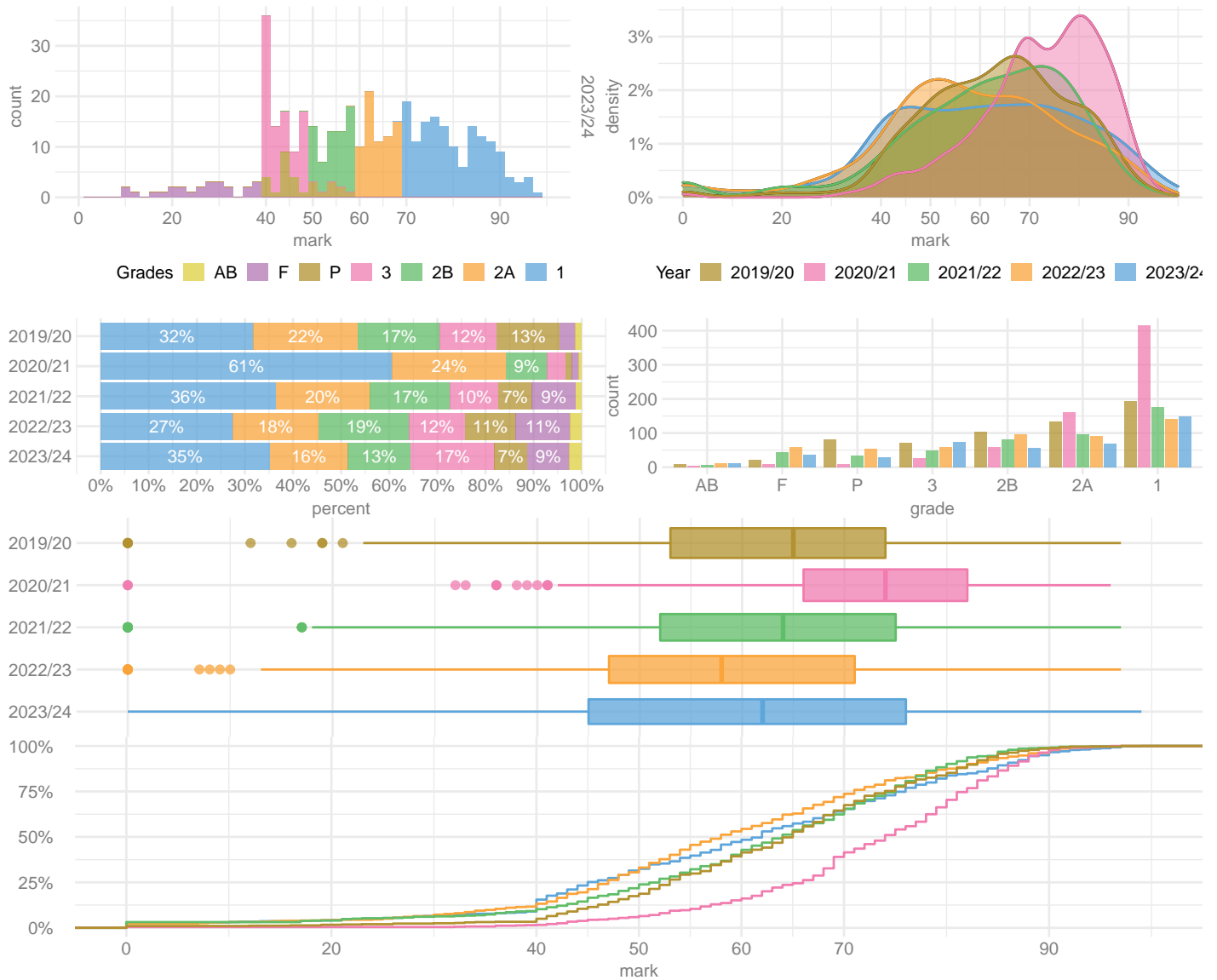
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	450	68.4	14.8	9	49.0	58.2	70.0	20.8	79.0	86.0	90.5	99
2020/21	537	72.2	13.9	21	52.6	64.0	75.0	19.0	83.0	88.0	90.0	97
2021/22	532	76.0	15.1	1	53.1	71.0	81.0	15.0	86.0	89.0	90.0	95
2022/23	700	60.7	17.9	4	40.0	48.0	60.0	26.0	74.0	84.0	89.0	99
2023/24	471	63.8	16.2	6	42.0	52.0	66.0	24.0	76.0	85.0	88.0	97

MA107: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	457	7	10	42	34	60	90	214		1.5	2.2	9.2	7.4	13.1	19.7	46.8
2020/21	544	7	7	11	27	51	105	336		1.3	1.3	2.0	5.0	9.4	19.3	61.8
2021/22	543	11	15	3	23	29	47	415		2.0	2.8	0.6	4.2	5.3	8.7	76.4
2022/23	716	16	53	48	124	116	126	233		2.2	7.4	6.7	17.3	16.2	17.6	32.5
2023/24	491	20	26	55	44	67	99	180		4.1	5.3	11.2	9.0	13.6	20.2	36.7

MA107: Grade summary – Count and Percentage distribution (%).

## MA100: Mathematical Methods



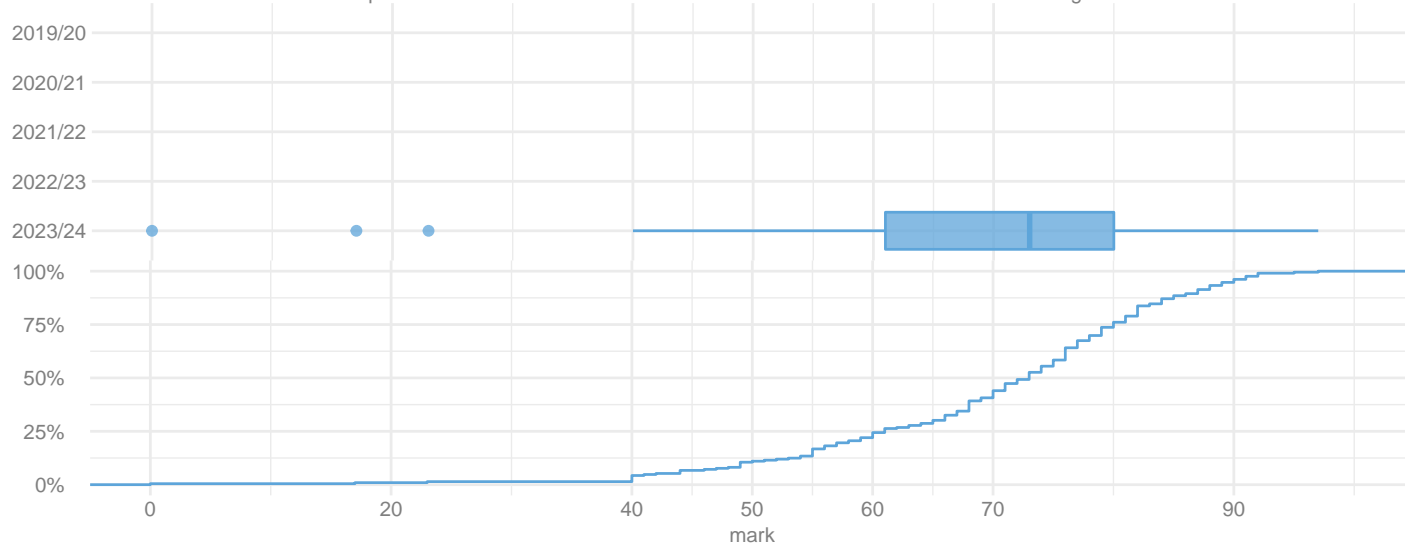
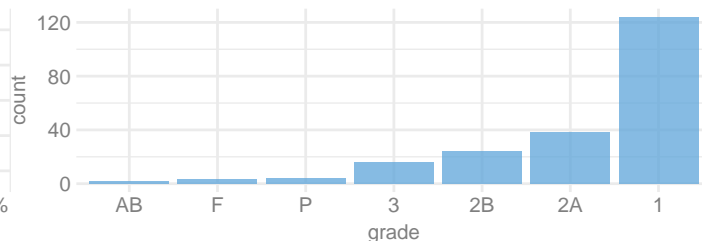
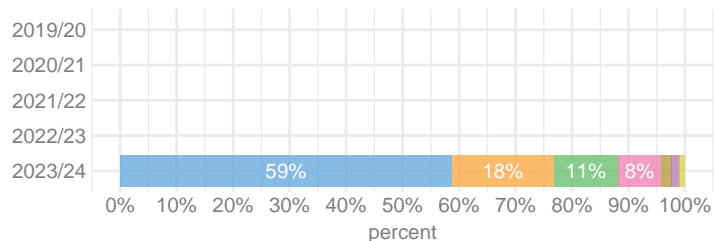
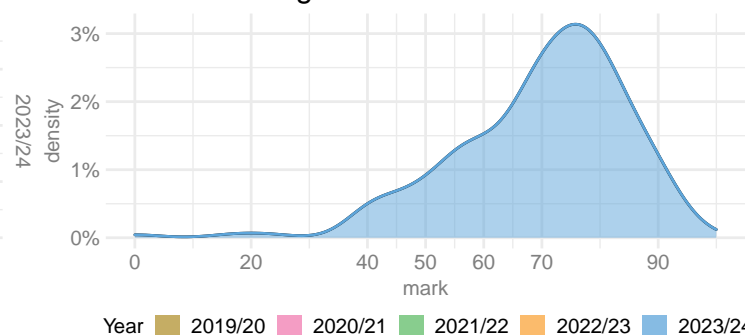
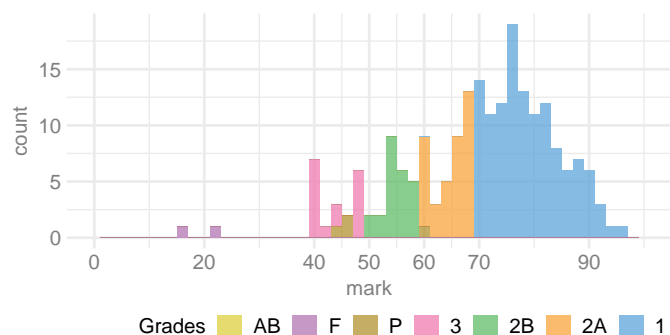
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	603	63.1	15.6	0	44.0	53.0	65.0	21.0	74.0	83.0	85.0	97
2020/21	682	72.2	13.2	0	55.0	66.0	74.0	16.0	82.0	87.0	89.0	96
2021/22	478	60.9	18.5	0	40.0	52.0	64.0	23.0	75.0	80.0	85.0	97
2022/23	498	57.9	19.2	0	36.0	47.0	58.0	24.0	71.0	82.0	88.0	97
2023/24	413	59.9	20.6	0	40.0	45.0	62.0	31.0	76.0	86.0	89.4	99

MA100: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	611	8	20	80	72	104	133	194		1.3	3.3	13.1	11.8	17.0	21.8	31.8
2020/21	686	4	10	9	26	59	162	416		0.6	1.5	1.3	3.8	8.6	23.6	60.6
2021/22	484	6	44	34	48	81	95	176		1.2	9.1	7.0	9.9	16.7	19.6	36.4
2022/23	510	12	58	54	59	96	91	140		2.4	11.4	10.6	11.6	18.8	17.8	27.5
2023/24	424	11	37	29	74	55	69	149		2.6	8.7	6.8	17.5	13.0	16.3	35.1

MA100: Grade summary – Count and Percentage distribution (%).

## MA108: Methods in Calculus and Linear Algebra



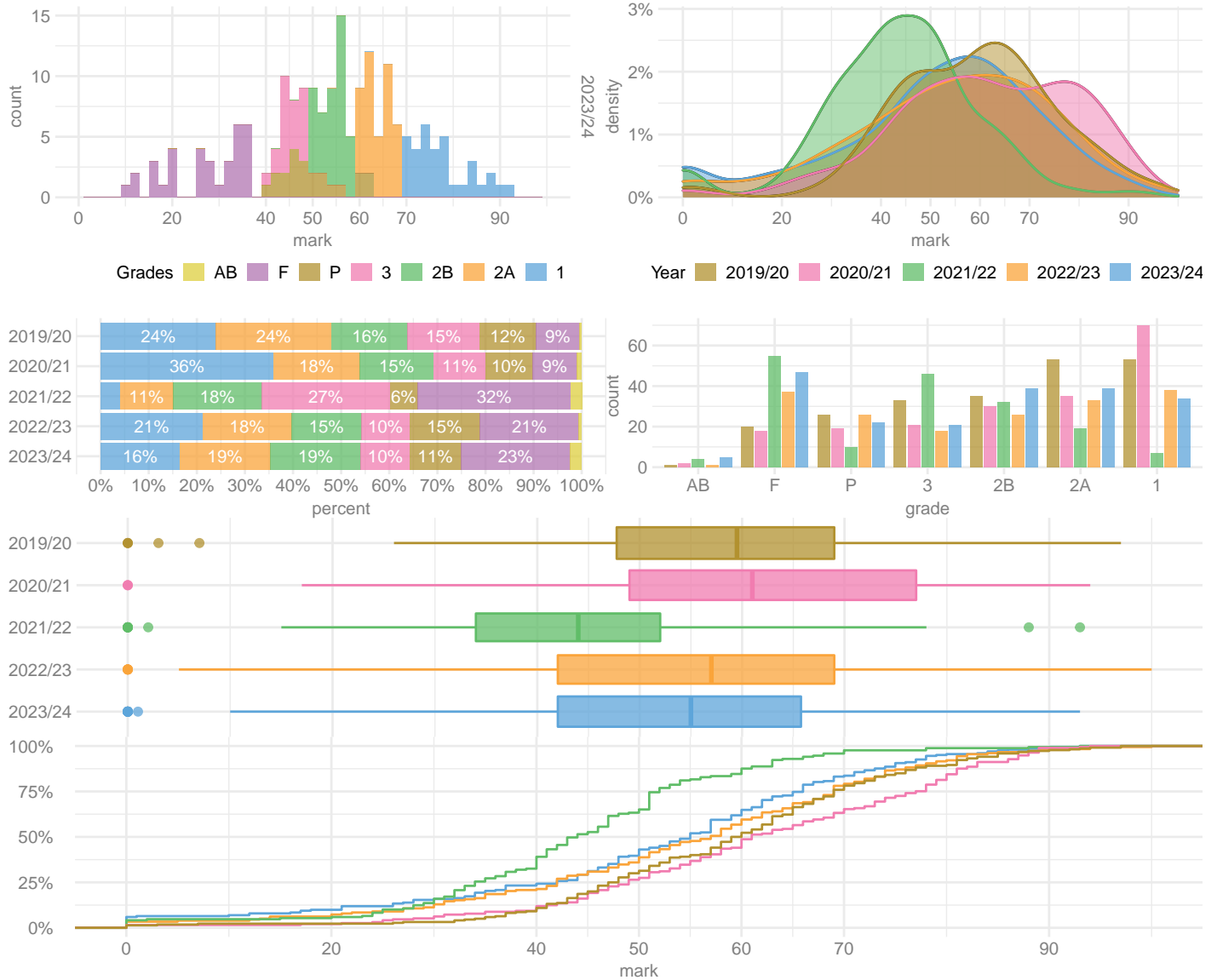
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20												
2020/21												
2021/22												
2022/23												
2023/24	209	69.9	14.8	0	49.0	61.0	73	19.0	80.0	87.0	89.6	97

MA108: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20																
2020/21																
2021/22																
2022/23																
2023/24	211	2	3	4	16	24	38	124		0.9	1.4	1.9	7.6	11.4	18.0	58.8

MA108: Grade summary – Count and Percentage distribution (%).

## MA103: Introduction to Abstract Mathematics



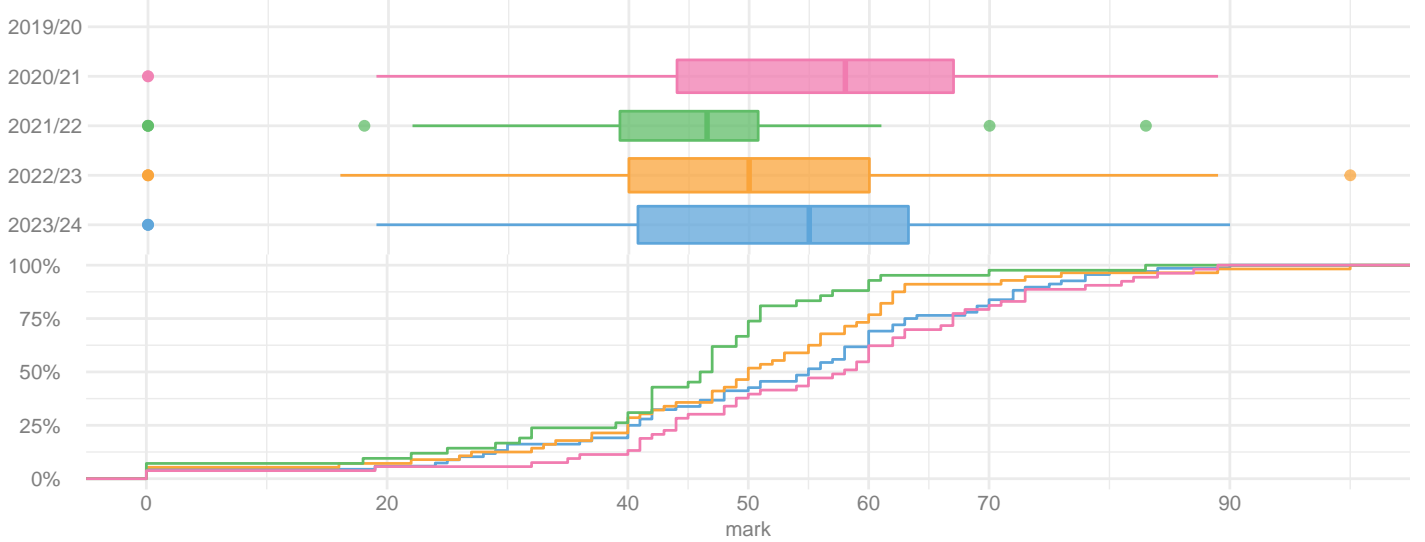
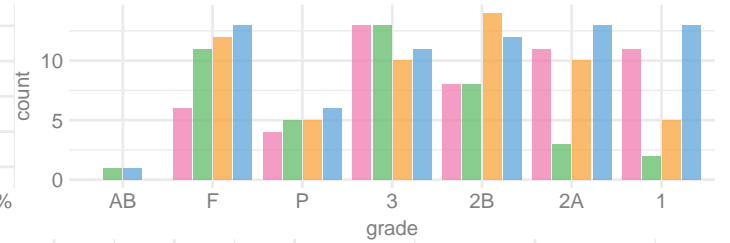
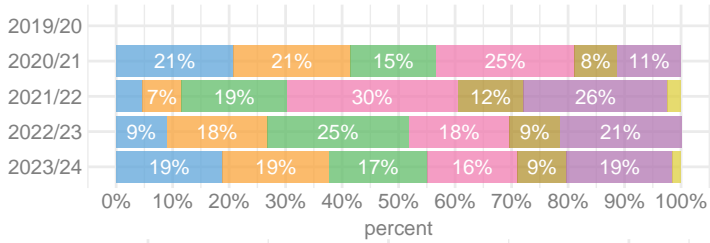
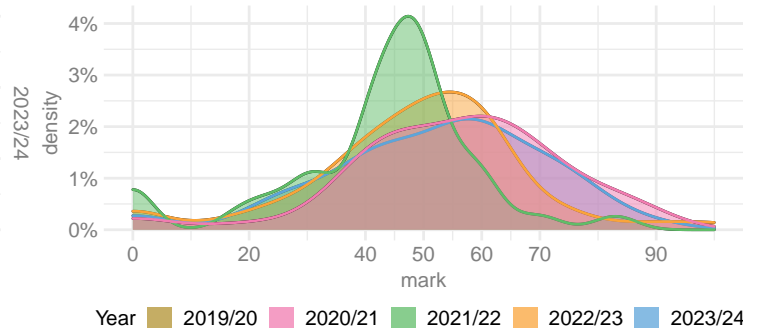
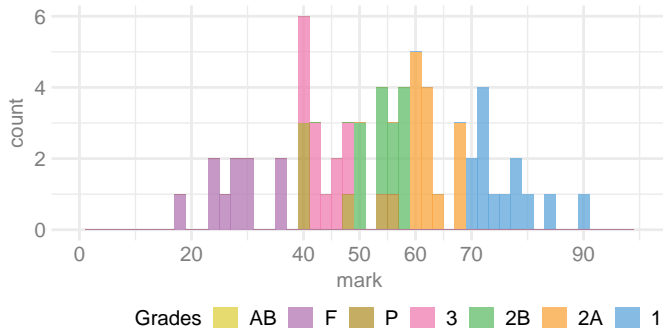
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	220	58.5	16.9	0	40.0	47.8	59.5	21.2	69.0	81.0	85.0	97
2020/21	193	61.2	18.6	0	40.0	49.0	61.0	28.0	77.0	83.0	87.4	94
2021/22	169	43.5	16.1	0	26.6	34.0	44.0	18.0	52.0	63.0	67.6	93
2022/23	178	53.9	20.7	0	27.0	42.0	57.0	27.0	69.0	78.0	82.0	100
2023/24	202	51.0	21.3	0	21.0	42.0	55.0	23.8	65.8	75.0	78.9	93

MA103: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	221	1	20	26	33	35	53	53		0.5	9.0	11.8	14.9	15.8	24.0	24.0
2020/21	195	2	18	19	21	30	35	70		1.0	9.2	9.7	10.8	15.4	17.9	35.9
2021/22	173	4	55	10	46	32	19	7		2.3	31.8	5.8	26.6	18.5	11.0	4.0
2022/23	179	1	37	26	18	26	33	38		0.6	20.7	14.5	10.1	14.5	18.4	21.2
2023/24	207	5	47	22	21	39	39	34		2.4	22.7	10.6	10.1	18.8	18.8	16.4

MA103: Grade summary – Count and Percentage distribution (%).

## MA102: Mathematical Proof and Analysis



Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20												
2020/21	53	55.2	18.6	0	36.8	44.0	58.0	23.0	67.0	77.0	82.8	89
2021/22	42	42.7	16.9	0	22.3	39.2	46.5	11.5	50.8	59.7	60.9	83
2022/23	56	48.5	18.9	0	26.5	40.0	50.0	20.0	60.0	63.0	73.8	100
2023/24	68	51.7	19.4	0	27.4	40.8	55.0	22.5	63.2	73.6	78.0	90

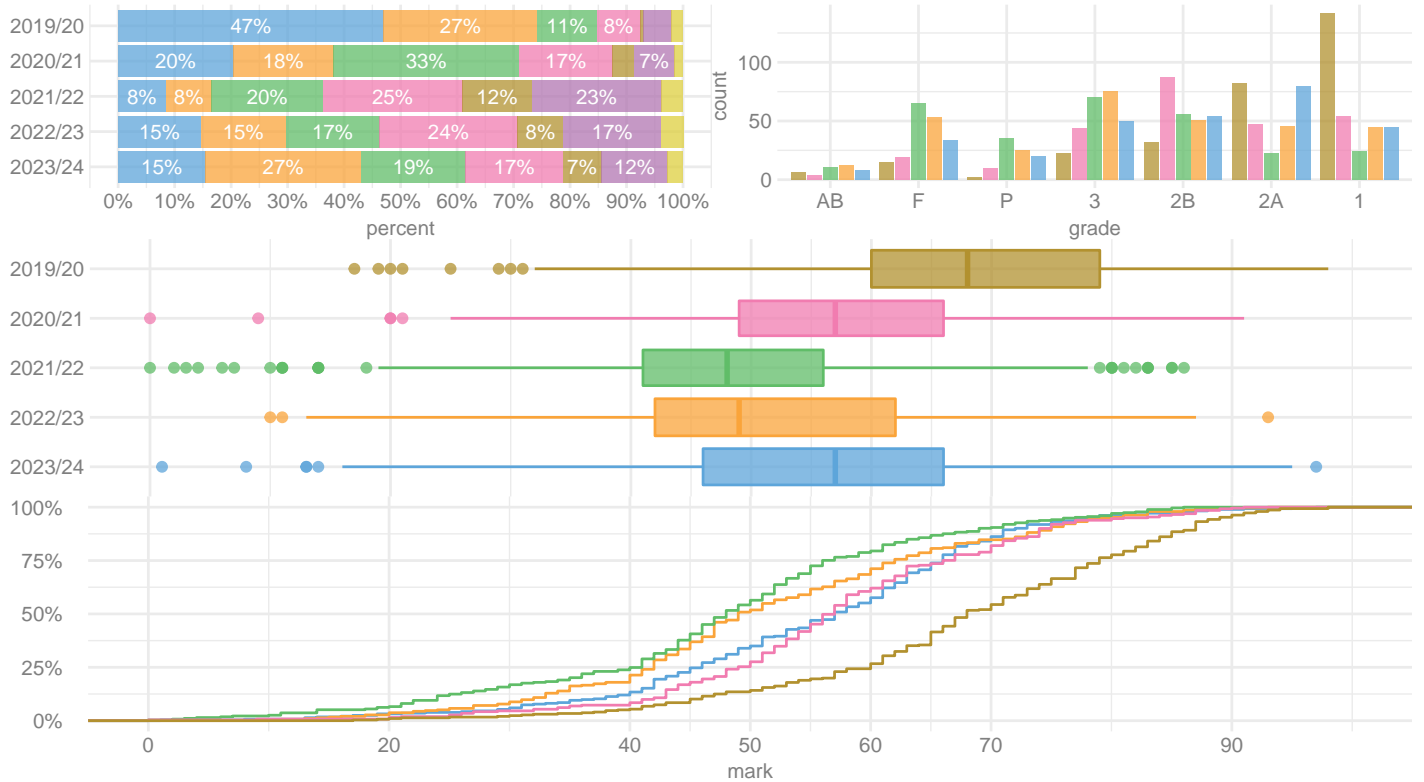
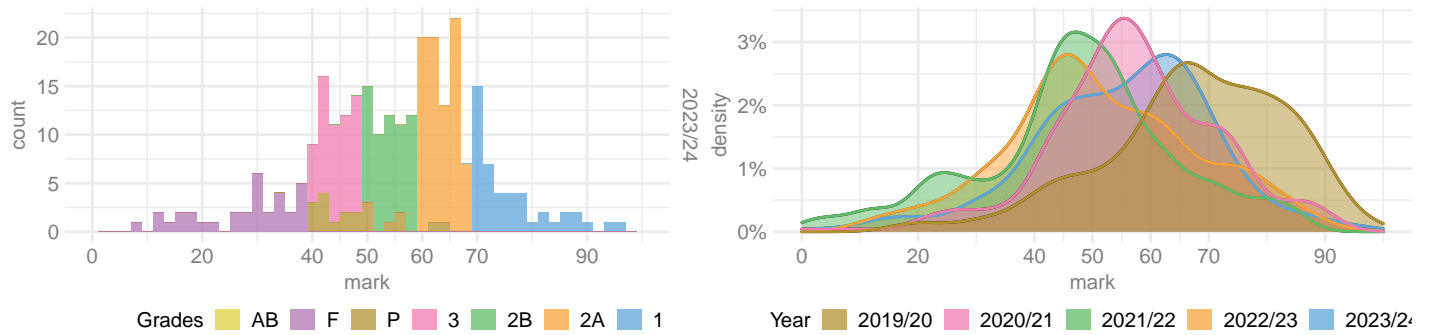
MA102: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20																
2020/21	53		6	4	13	8	11	11		11.3	7.5	24.5	15.1	20.8	20.8	
2021/22	43	1	11	5	13	8	3	2	2.3	25.6	11.6	30.2	18.6	7.0	4.7	
2022/23	56		12	5	10	14	10	5		21.4	8.9	17.9	25.0	17.9	8.9	
2023/24	69	1	13	6	11	12	13	13	1.4	18.8	8.7	15.9	17.4	18.8	18.8	

MA102: Grade summary – Count and Percentage distribution (%).



## MA212: Further Mathematical Methods



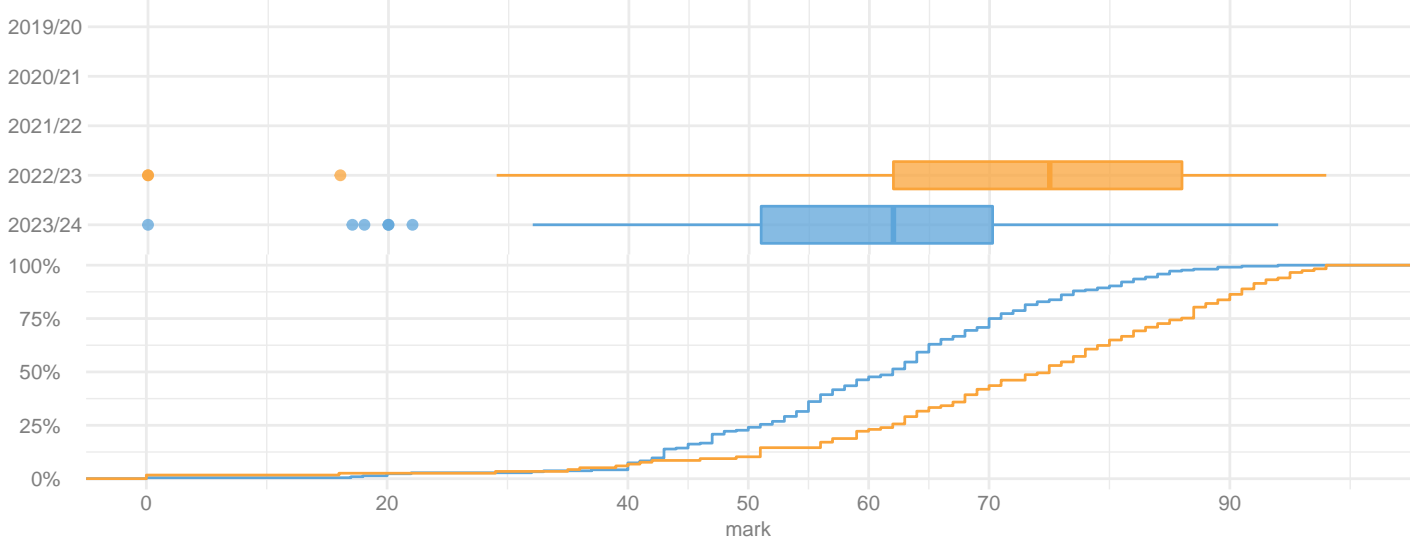
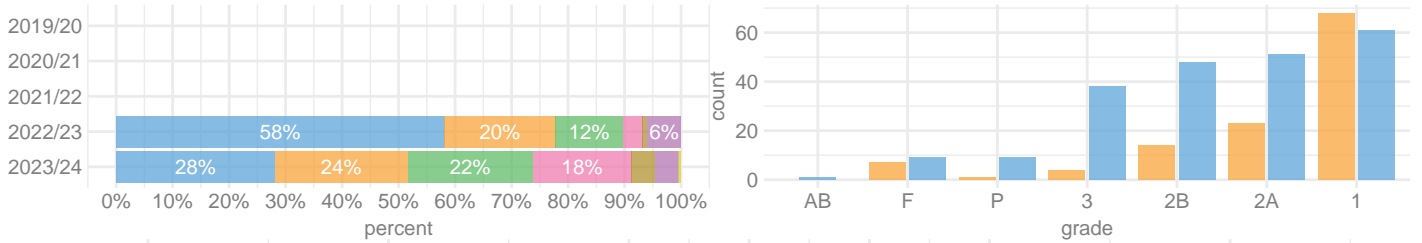
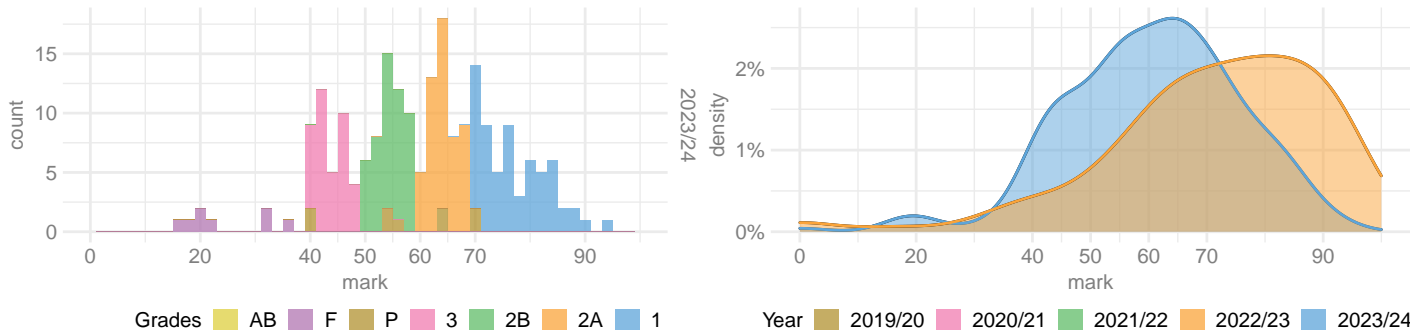
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	296	67.5	15.6	17	45.5	60.0	68.0	19.0	79.0	87.0	89.0	98
2020/21	261	57.0	14.5	0	42.0	49.0	57.0	17.0	66.0	74.0	81.0	91
2021/22	273	47.5	17.1	0	24.0	41.0	48.0	15.0	56.0	69.0	76.4	86
2022/23	295	51.6	16.4	10	32.0	42.0	49.0	20.0	62.0	75.0	79.3	93
2023/24	283	55.4	15.5	1	37.2	46.0	57.0	20.0	66.0	72.0	77.9	97

MA212: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	302	6	15	2	23	32	82	142		2.0	5.0	0.7	7.6	10.6	27.2	47.0
2020/21	265	4	19	10	44	87	47	54		1.5	7.2	3.8	16.6	32.8	17.7	20.4
2021/22	284	11	65	35	70	56	23	24		3.9	22.9	12.3	24.6	19.7	8.1	8.5
2022/23	307	12	53	25	75	51	46	45		3.9	17.3	8.1	24.4	16.6	15.0	14.7
2023/24	291	8	34	20	50	54	80	45		2.7	11.7	6.9	17.2	18.6	27.5	15.5

MA212: Grade summary – Count and Percentage distribution (%).

## MA213: Operations Research Techniques



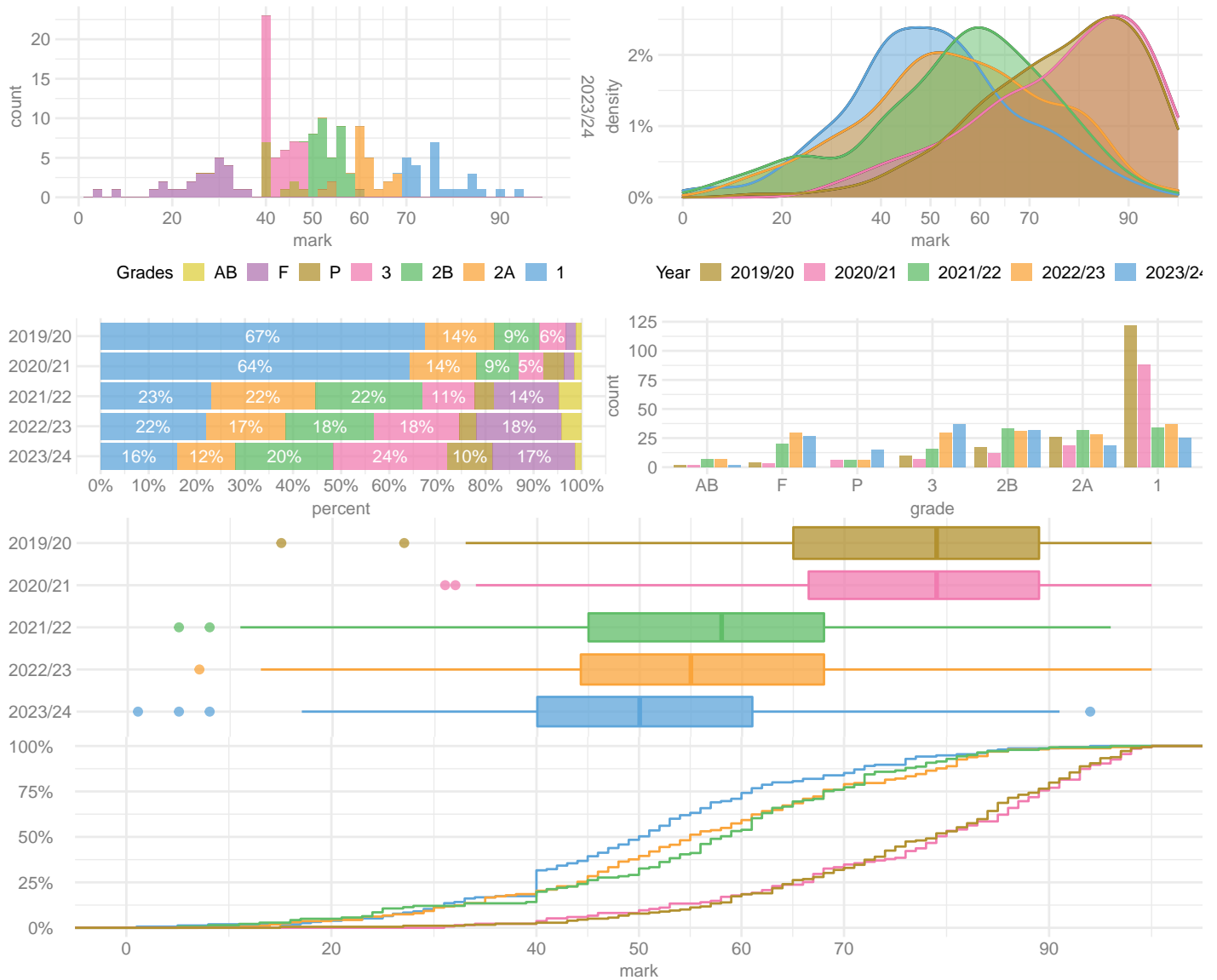
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20												
2020/21												
2021/22												
2022/23	117	71.2	19.0	0	50.2	62.0	75.0	24.0	86.0	92.0	95.0	98
2023/24	216	60.5	15.1	0	43.0	51.0	62.0	19.2	70.2	80.0	84.0	94

MA213: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20																
2020/21																
2021/22																
2022/23	117		7	1	4	14	23	68		6.0	0.9	3.4	12.0	19.7	58.1	
2023/24	217	1	9	9	38	48	51	61		0.5	4.1	4.1	17.5	22.1	23.5	28.1

MA213: Grade summary – Count and Percentage distribution (%).

## MA203: Real Analysis



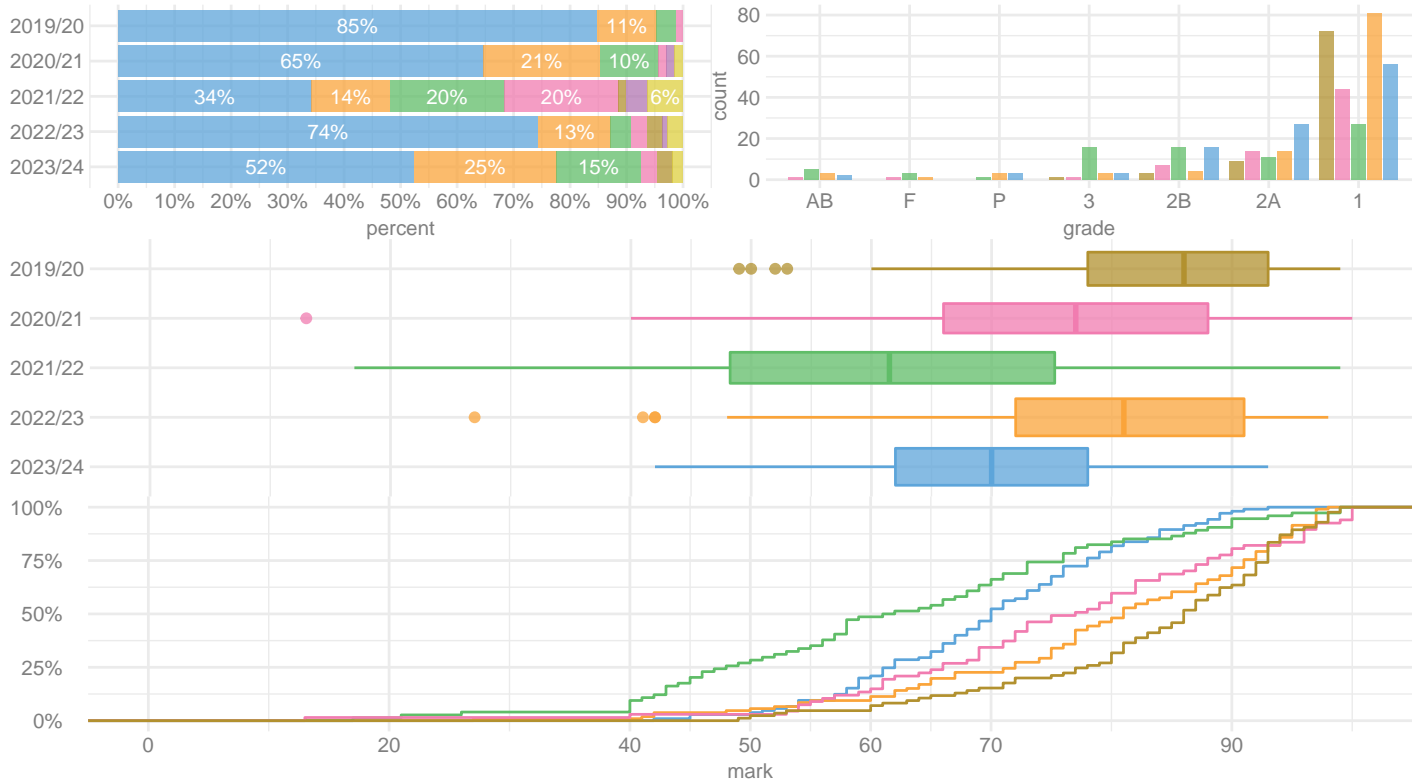
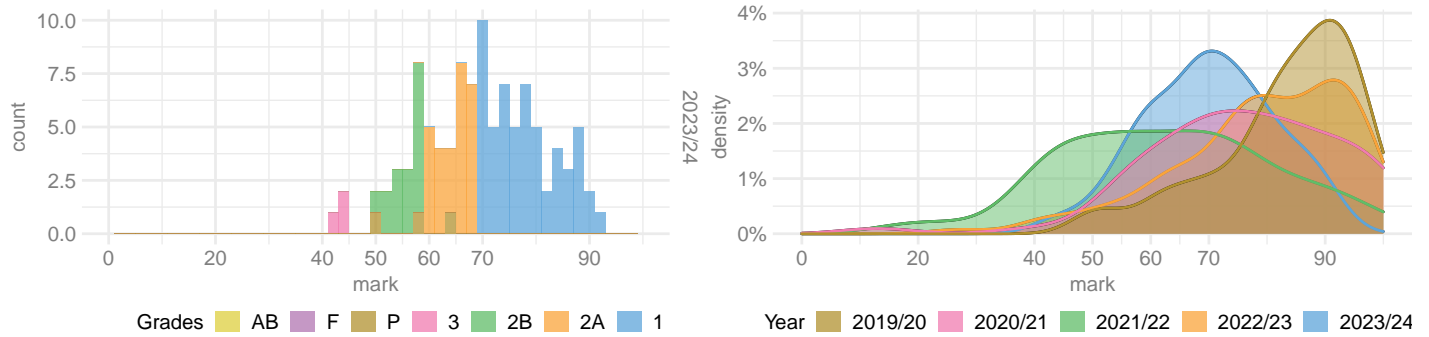
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	179	75.8	16.1	15	54.8	65.0	79.0	24.0	89.0	94.0	97.0	100
2020/21	135	76.1	16.8	31	51.4	66.5	79.0	22.5	89.0	94.6	97.0	100
2021/22	141	55.8	18.6	5	25.0	45.0	58.0	23.0	68.0	78.0	82.0	96
2022/23	162	55.4	18.8	7	30.0	44.2	55.0	23.8	68.0	81.0	83.9	100
2023/24	155	50.6	17.3	1	29.4	40.0	50.0	21.0	61.0	74.8	79.6	94

MA203: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	181	2	4	10	17	26	122		1.1	2.2			5.5	9.4	14.4	67.4
2020/21	137	2	3	6	7	12	88		1.5	2.2	4.4	5.1	8.8	13.9	64.2	
2021/22	148	7	20	6	16	33	32	34	4.7	13.5	4.1	10.8	22.3	21.6	23.0	
2022/23	169	7	30	6	30	31	28	37	4.1	17.8	3.6	17.8	18.3	16.6	21.9	
2023/24	157	2	27	15	37	32	19	25	1.3	17.2	9.6	23.6	20.4	12.1	15.9	

MA203: Grade summary – Count and Percentage distribution (%).

## MA209: Differential Equations



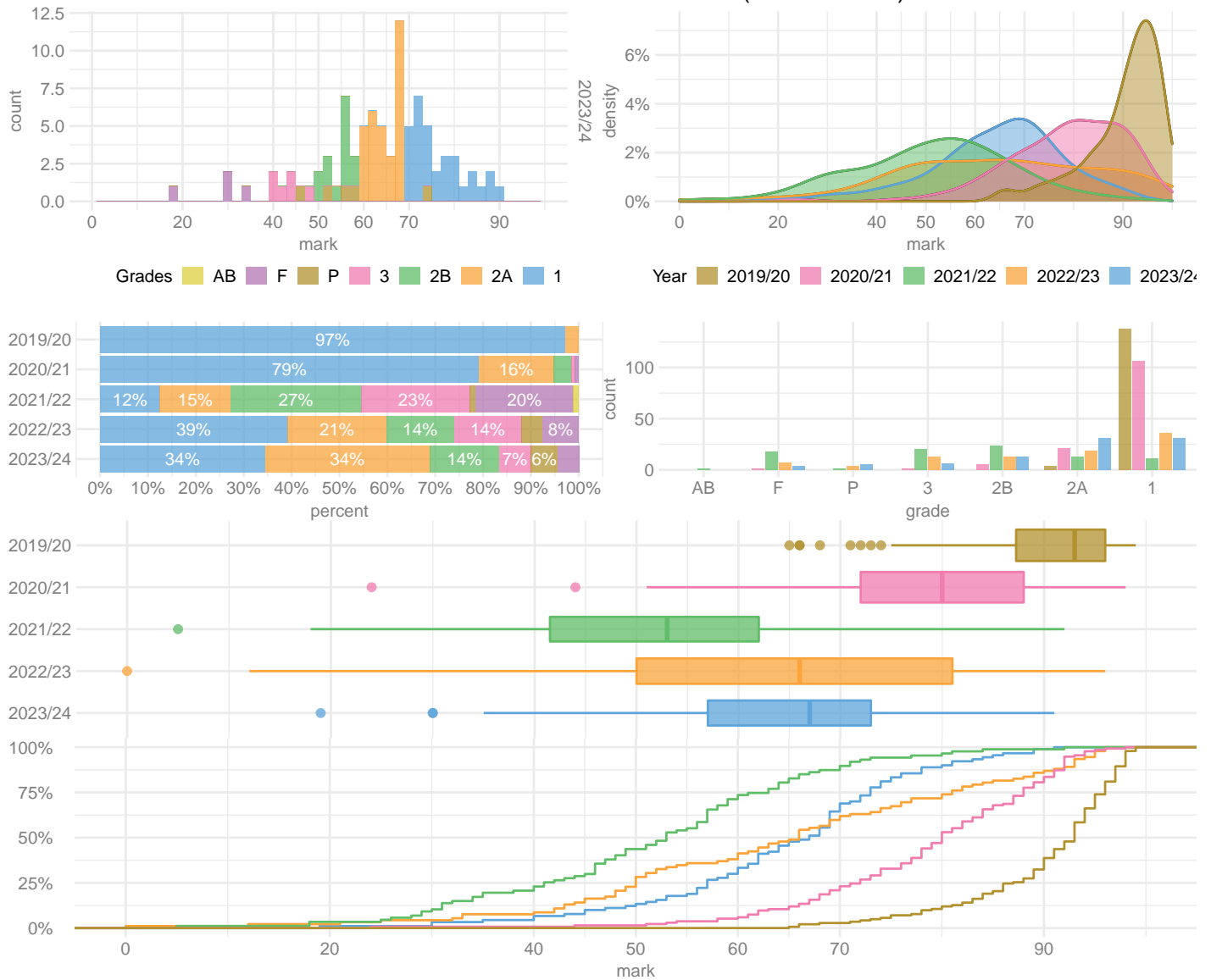
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	85	83.2	12.3	49	64.4	78.0	86.0	15.0	93.0	95.6	98.0	99
2020/21	67	76.0	16.3	13	56.6	66.0	77.0	22.0	88.0	96.4	99.7	100
2021/22	74	62.4	18.2	17	41.3	48.2	61.5	27.0	75.2	87.7	91.0	99
2022/23	106	79.0	15.0	27	60.0	72.0	81.0	19.0	91.0	95.0	97.0	98
2023/24	105	70.1	11.2	42	57.0	62.0	70.0	16.0	78.0	85.2	88.8	93

MA209: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	1	AB	F	P	3	2B	2A	1
2019/20	85				1	3	9	72					1.2	3.5	10.6	84.7
2020/21	68	1	1		1	7	14	44		1.5	1.5		1.5	10.3	20.6	64.7
2021/22	79	5	3	1	16	16	11	27		6.3	3.8	1.3	20.3	20.3	13.9	34.2
2022/23	109	3	1	3	3	4	14	81		2.8	0.9	2.8	2.8	3.7	12.8	74.3
2023/24	107	2		3	3	16	27	56		1.9		2.8	2.8	15.0	25.2	52.3

MA209: Grade summary – Count and Percentage distribution (%).

## MA207: Further Quantitative Methods (Mathematics)



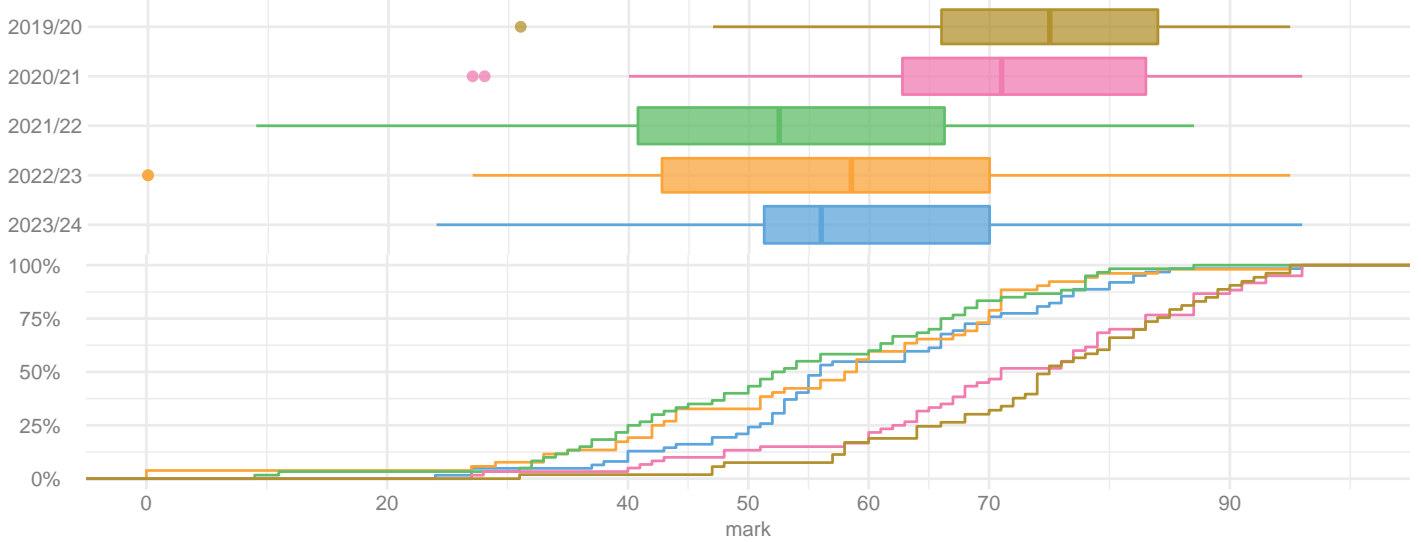
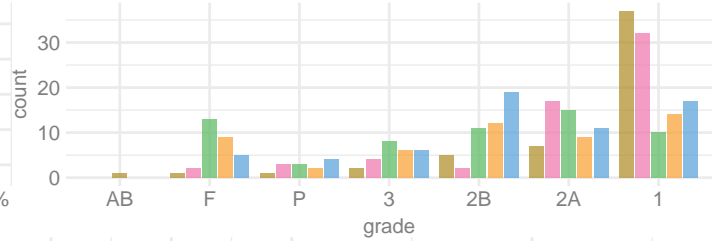
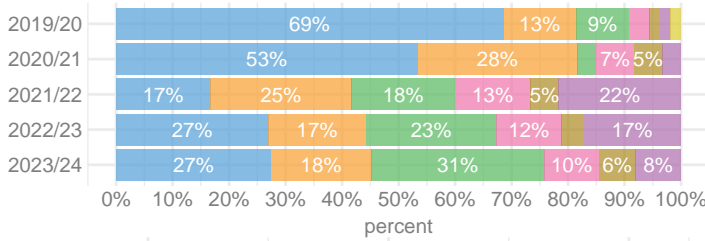
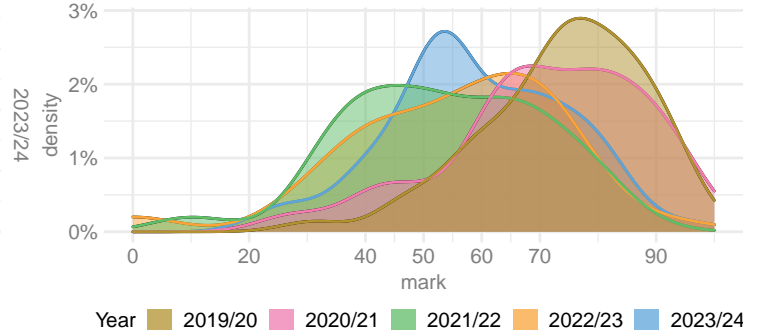
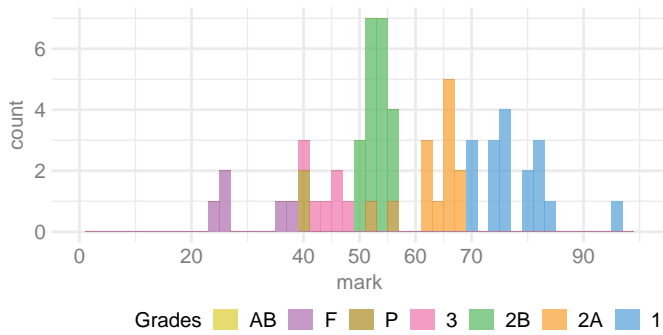
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	142	90.2	7.6	65	79.1	87.2	93.0	8.8	96.0	97.9	98.0	99
2020/21	134	78.6	11.8	24	63.6	72.0	80.0	16.0	88.0	92.0	92.3	98
2021/22	87	51.5	16.0	5	30.6	41.5	53.0	20.5	62.0	70.4	75.8	92
2022/23	92	64.5	20.5	0	42.1	50.0	66.0	31.0	81.0	92.9	94.5	96
2023/24	90	64.4	13.5	19	46.8	57.0	67.0	16.0	73.0	80.1	84.5	91

MA207: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	142						4	138							2.8	97.2
2020/21	134		1		1	5	21	106			0.7		0.7	3.7	15.7	79.1
2021/22	87	1	18	1	20	24	13	11	1.1	20.5	1.1	22.7	27.3	14.8	12.5	
2022/23	92		7	4	13	13	19	36			7.6	4.3	14.1	14.1	20.7	39.1
2023/24	90		4	5	6	13	31	31			4.4	5.6	6.7	14.4	34.4	34.4

MA207: Grade summary – Count and Percentage distribution (%).

## MA208: Optimisation Theory



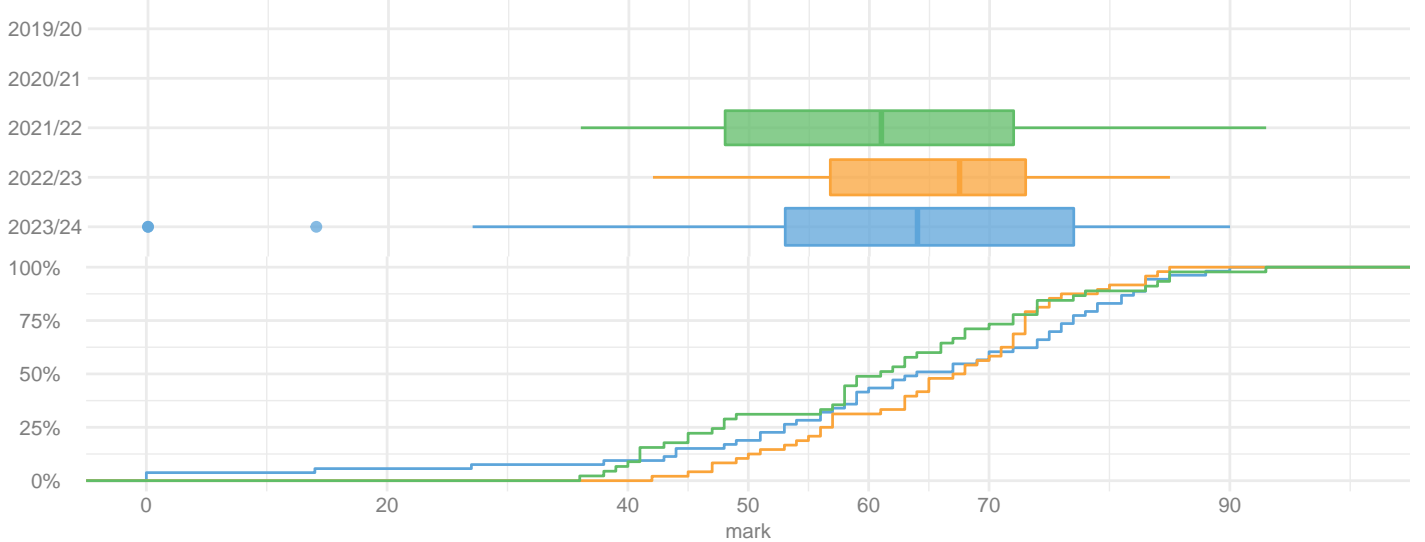
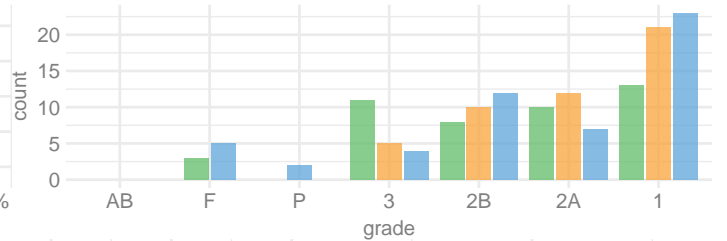
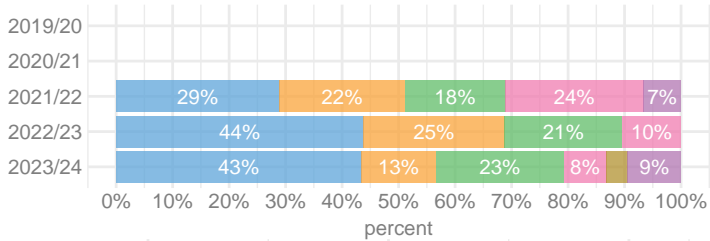
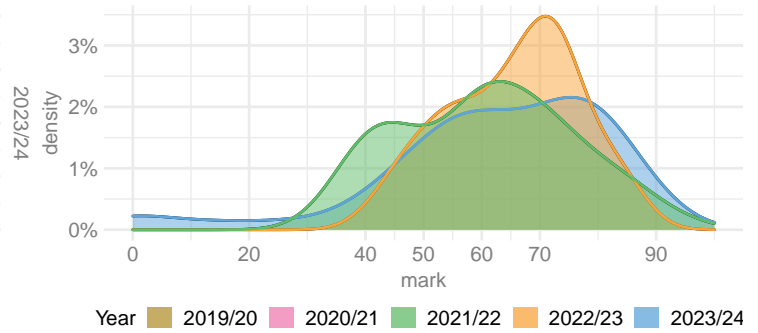
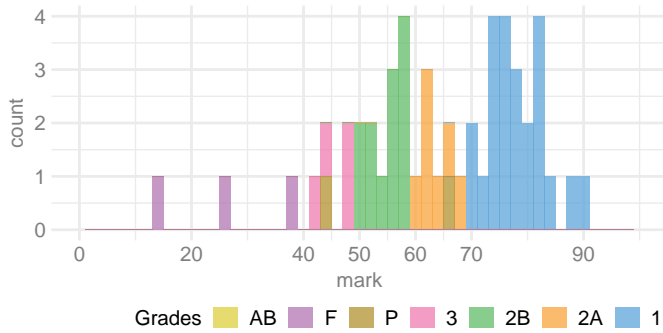
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	53	74.0	13.8	31	57.2	66.0	75.0	18.0	84.0	89.8	92.4	95
2020/21	60	71.0	16.7	27	47.5	62.8	71.0	20.2	83.0	91.0	93.1	96
2021/22	60	53.6	17.0	9	33.9	40.8	52.5	25.5	66.2	78.0	78.0	87
2022/23	52	55.2	18.8	0	33.2	42.8	58.5	27.2	70.0	73.7	78.4	95
2023/24	62	59.3	15.3	24	40.0	51.2	56.0	18.8	70.0	79.7	82.0	96

MA208: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	54	1	1	1	2	5	7	37		1.9	1.9	1.9	3.7	9.3	13.0	68.5
2020/21	60		2	3	4	2	17	32			3.3	5.0	6.7	3.3	28.3	53.3
2021/22	60		13	3	8	11	15	10			21.7	5.0	13.3	18.3	25.0	16.7
2022/23	52		9	2	6	12	9	14			17.3	3.8	11.5	23.1	17.3	26.9
2023/24	62		5	4	6	19	11	17			8.1	6.5	9.7	30.6	17.7	27.4

MA208: Grade summary – Count and Percentage distribution (%).

## MA214: Algorithms and Data Structures



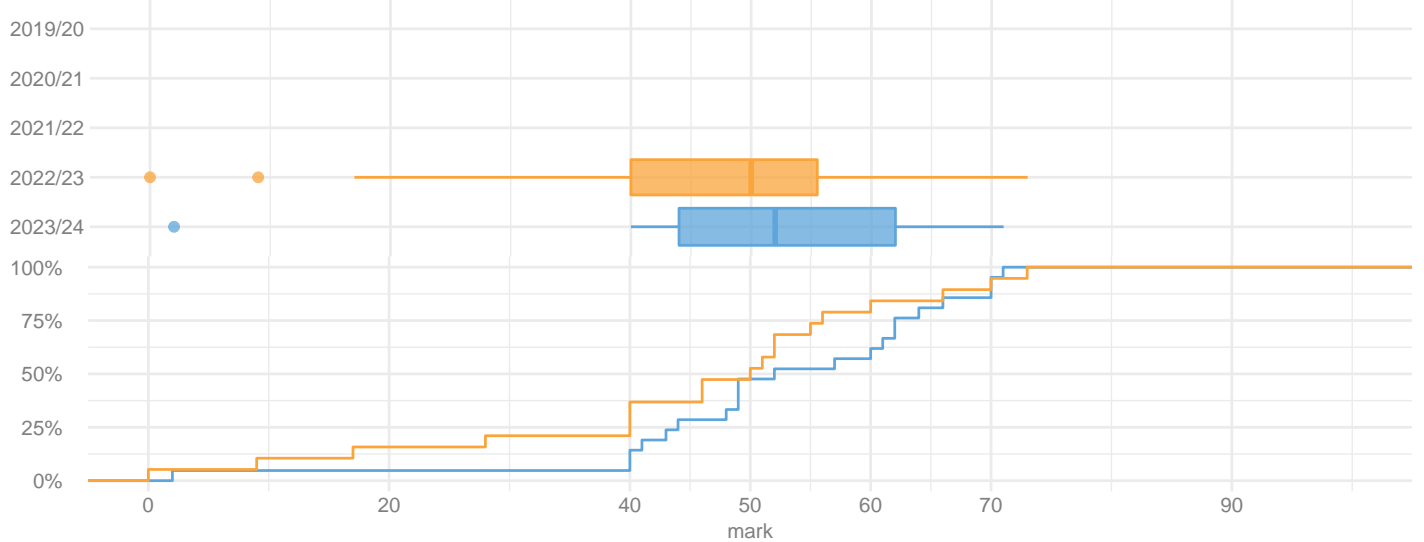
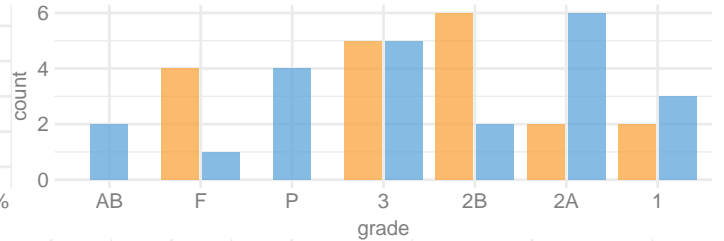
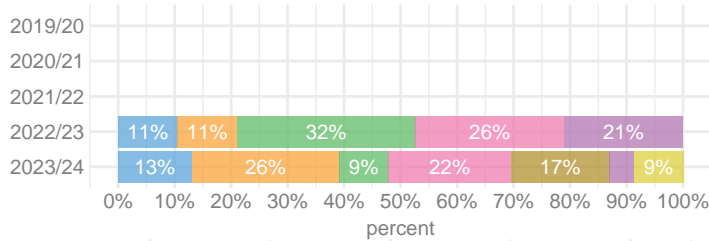
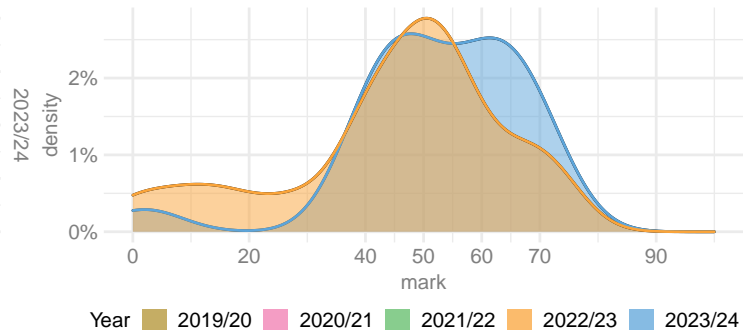
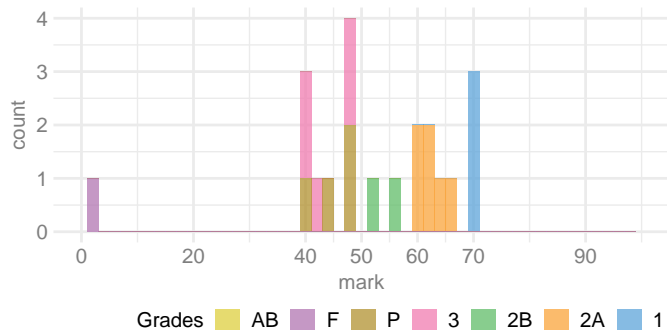
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20												
2020/21												
2021/22	45	60.7	14.8	36	41.0	48.0	61.0	24.0	72.0	81.0	84.8	93
2022/23	48	65.5	11.1	42	49.7	56.8	67.5	16.2	73.0	79.3	83.0	85
2023/24	53	62.2	20.0	0	43.2	53.0	64.0	24.0	77.0	82.8	83.8	90

MA214: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20																
2020/21																
2021/22	45		3		11	8	10	13		6.7			24.4	17.8	22.2	28.9
2022/23	48				5	10	12	21					10.4	20.8	25.0	43.8
2023/24	53		5	2	4	12	7	23		9.4	3.8		7.5	22.6	13.2	43.4

MA214: Grade summary – Count and Percentage distribution (%).

## MA222: Further Mathematical Methods (Linear Algebra)



Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20												
2020/21												
2021/22												
2022/23	19	44.8	19.6	0	15.4	40.0	50	15.5	55.5	66.8	70.3	73
2023/24	21	52.4	15.5	2	40.0	44.0	52	18.0	62.0	70.0	70.0	71

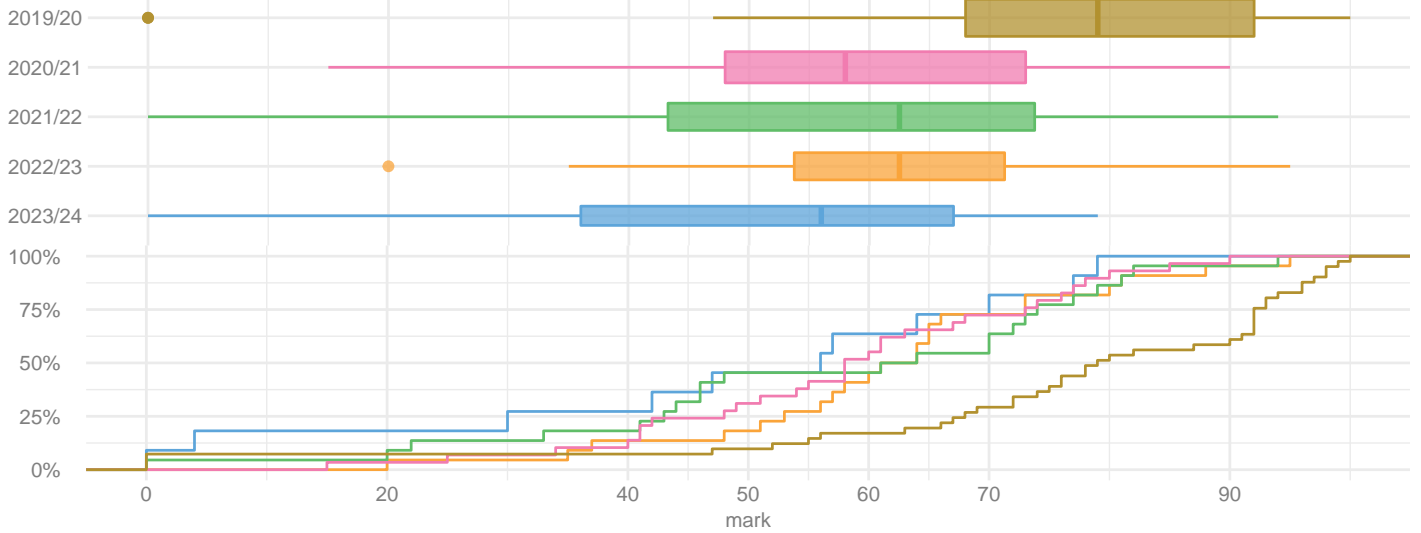
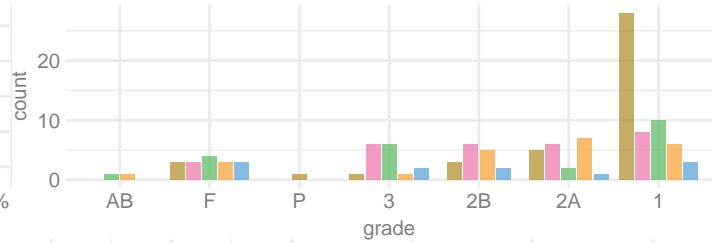
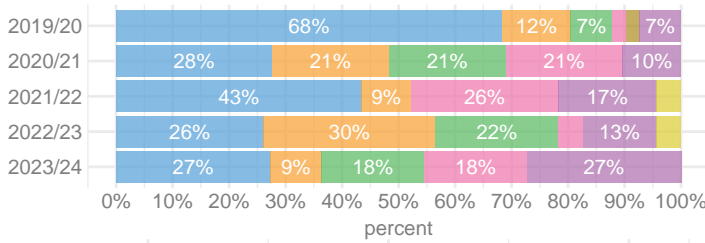
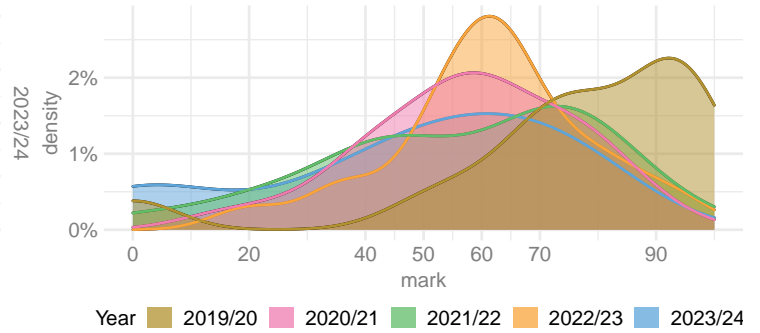
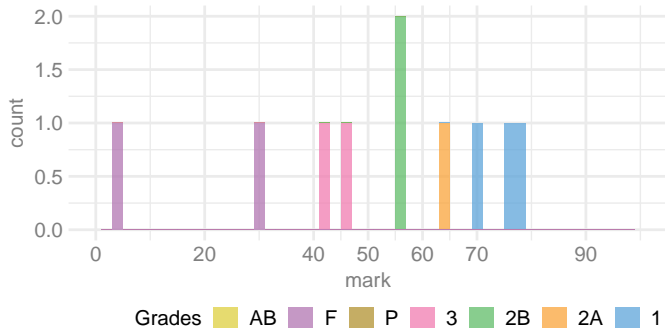
MA222: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20																
2020/21																
2021/22																
2022/23	19		4		5	6	2	2		21.1			26.3	31.6	10.5	10.5
2023/24	23	2	1	4	5	2	6	3		8.7	4.3	17.4	21.7	8.7	26.1	13.0

MA222: Grade summary – Count and Percentage distribution (%).



## MA210: Discrete Mathematics



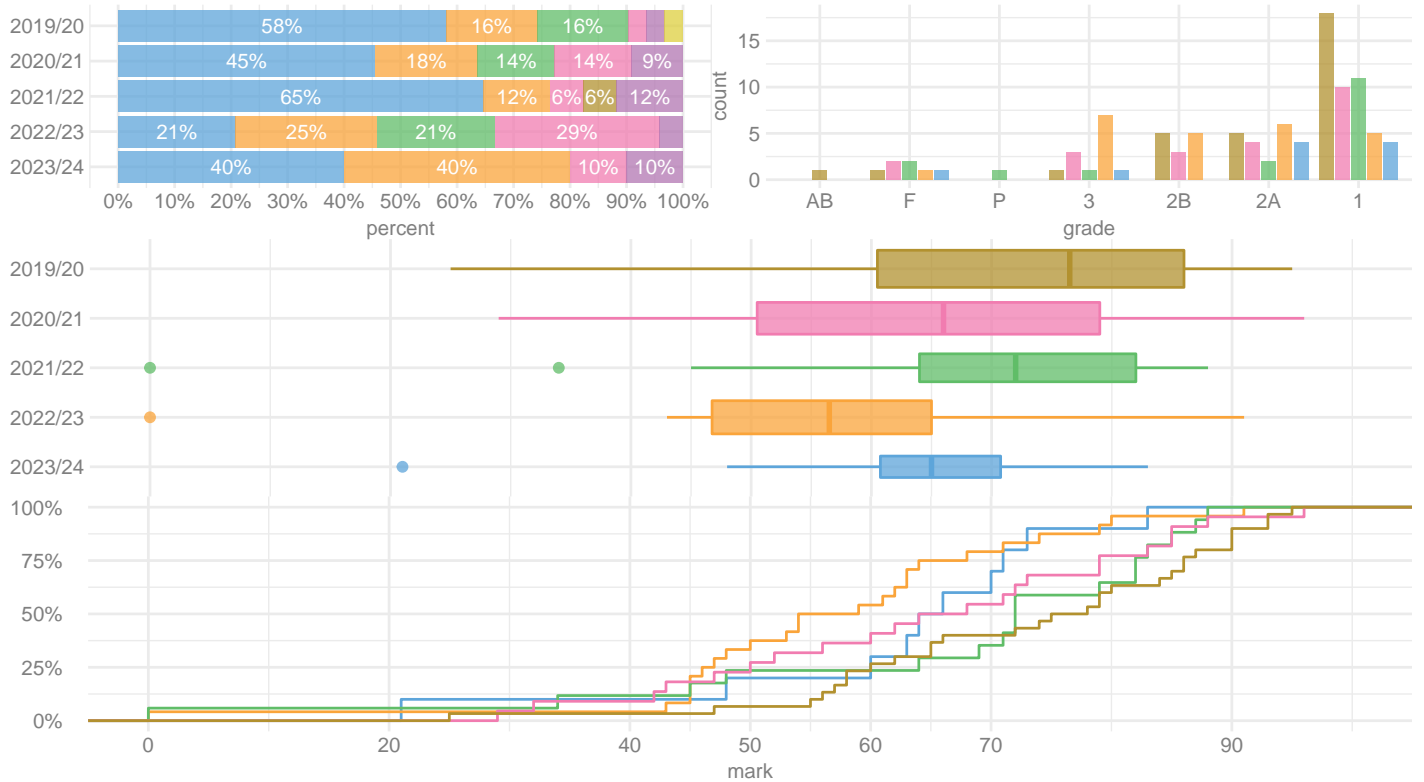
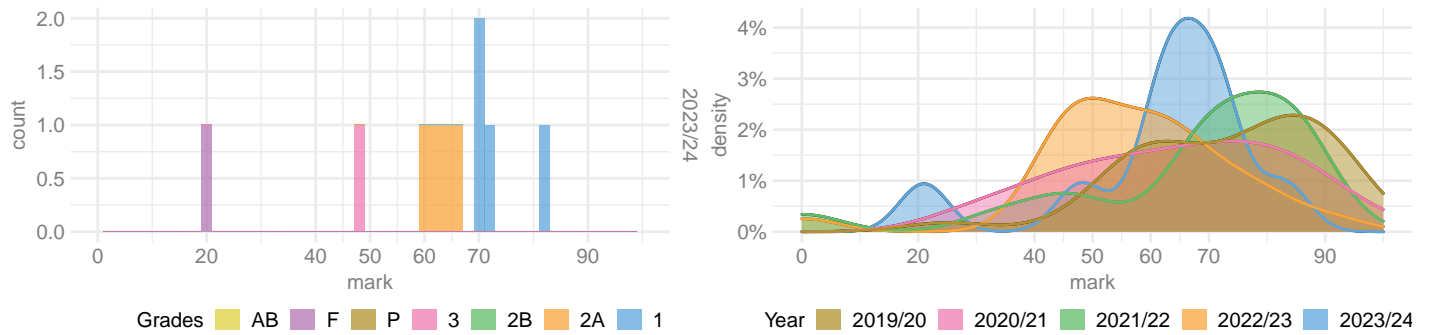
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	41	75.0	25.6	0	52.0	68.0	79.0	24.0	92.0	97.0	98.0	100
2020/21	29	58.0	17.9	15	38.8	48.0	58.0	25.0	73.0	78.4	83.0	90
2021/22	22	56.4	23.9	0	23.1	43.2	62.5	30.5	73.8	80.8	82.0	94
2022/23	22	61.4	17.4	20	38.1	53.8	62.5	17.5	71.2	80.9	87.6	95
2023/24	11	47.8	27.0	0	4.0	36.0	56.0	31.0	67.0	77.0	78.0	79

MA210: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	41		3	1	1	3	5	28			7.3	2.4	2.4	7.3	12.2	68.3
2020/21	29		3		6	6	6	8			10.3		20.7	20.7	20.7	27.6
2021/22	23	1	4		6		2	10	4.3	17.4			26.1		8.7	43.5
2022/23	23	1	3		1	5	7	6	4.3	13.0			4.3	21.7	30.4	26.1
2023/24	11		3		2	2	1	3		27.3			18.2	18.2	9.1	27.3

MA210: Grade summary – Count and Percentage distribution (%).

## MA211: Algebra and Number Theory



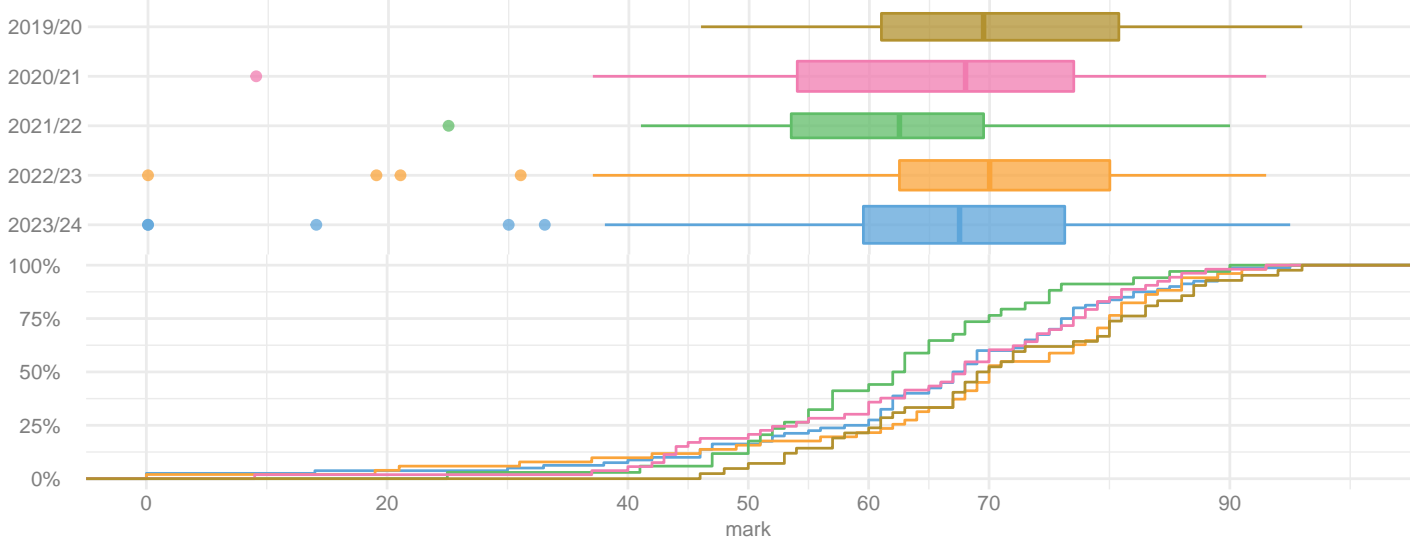
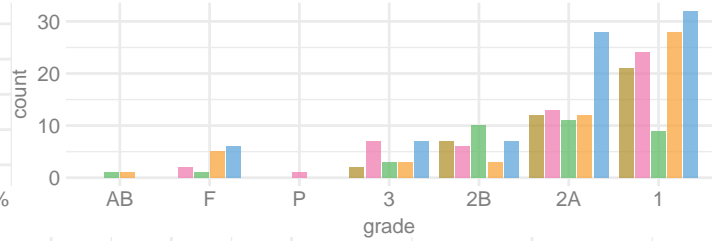
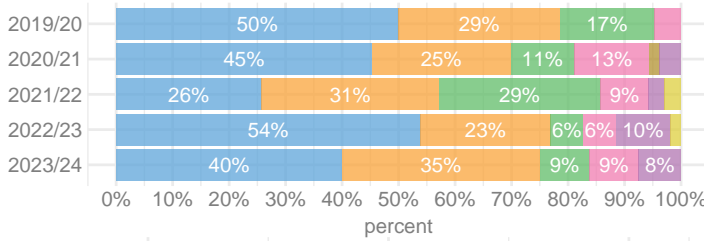
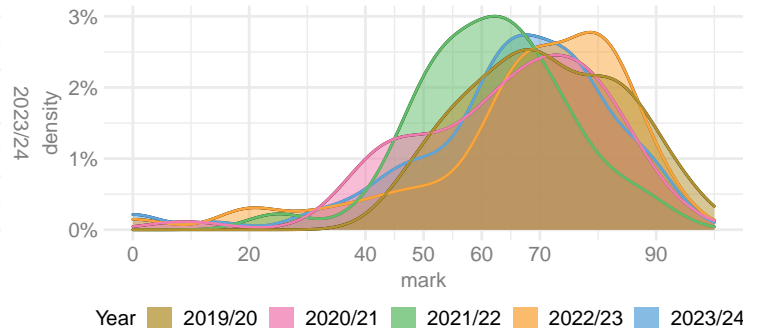
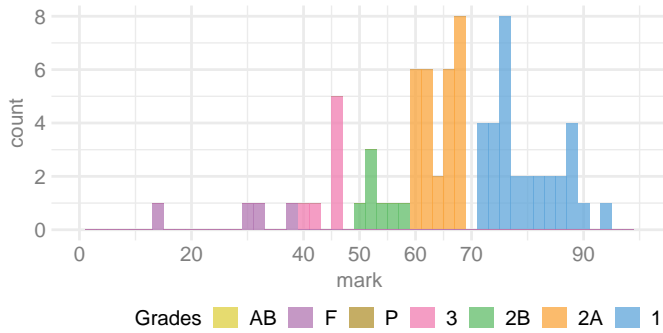
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	30	73.0	16.5	25	55.9	60.5	76.5	25.5	86.0	90.3	93.0	95
2020/21	22	64.4	18.8	29	42.1	50.5	66.0	28.5	79.0	85.0	87.8	96
2021/22	17	66.6	23.1	0	40.6	64.0	72.0	18.0	82.0	85.8	87.2	88
2022/23	24	56.9	17.7	0	45.0	46.8	56.5	18.2	65.0	77.5	79.8	91
2023/24	10	61.9	17.0	21	45.3	60.8	65.0	10.0	70.8	74.0	78.5	83

MA211: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	31	1	1	1	5	5	18		3.2	3.2			3.2	16.1	16.1	58.1
2020/21	22		2		3	3	10			9.1			13.6	13.6	18.2	45.5
2021/22	17		2	1	1		2	11		11.8	5.9		5.9		11.8	64.7
2022/23	24		1		7	5	6	5		4.2			29.2	20.8	25.0	20.8
2023/24	10		1		1		4	4		10.0			10.0		40.0	40.0

MA211: Grade summary – Count and Percentage distribution (%).

## MA301: Mathematical Game Theory



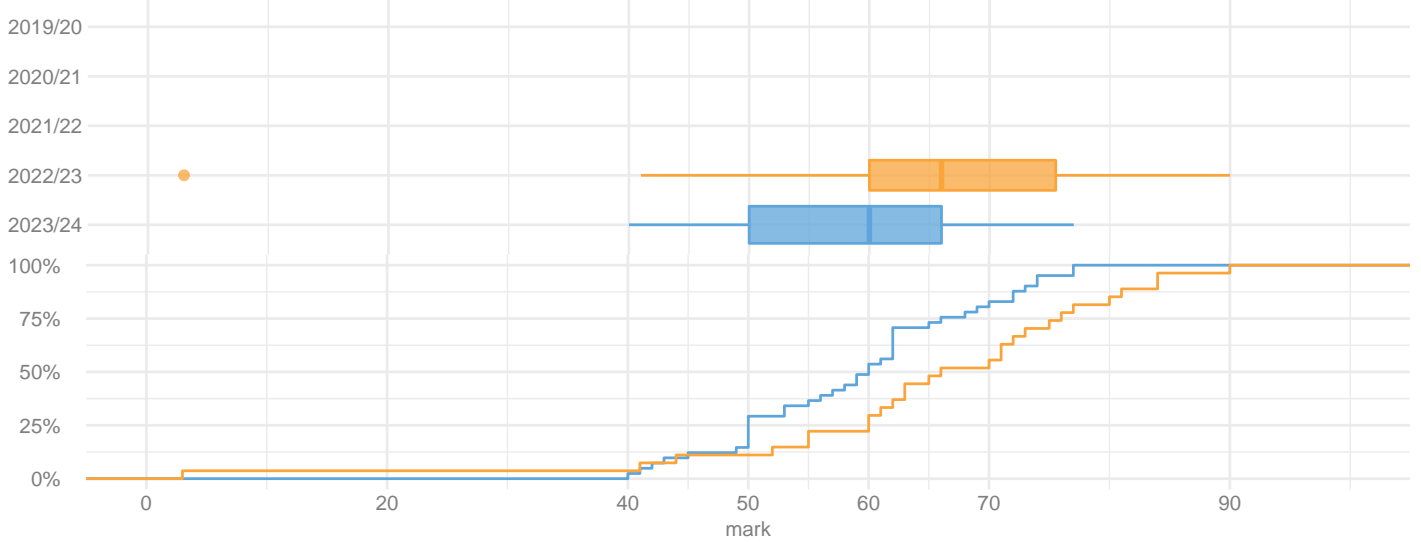
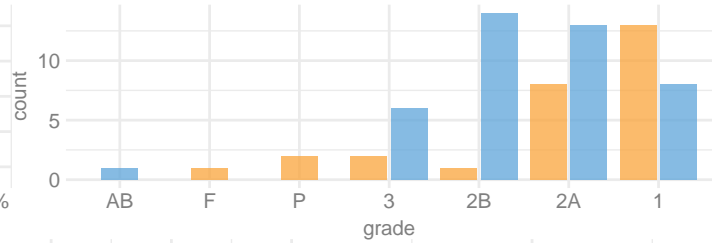
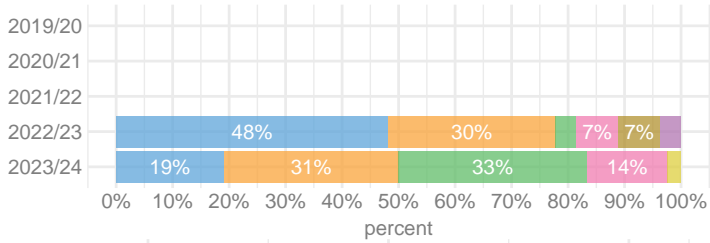
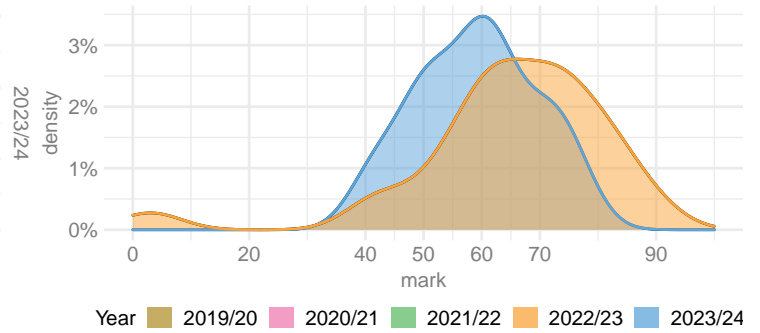
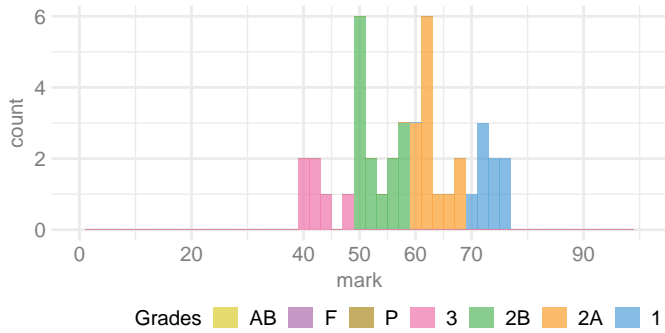
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	42	70.8	13.2	46	53.1	61.0	69.5	19.8	80.8	87.0	90.8	96
2020/21	53	64.8	16.3	9	43.2	54.0	68.0	23.0	77.0	82.6	85.4	93
2021/22	34	61.8	13.1	25	47.9	53.5	62.5	16.0	69.5	75.7	83.0	90
2022/23	51	67.3	19.3	0	42.0	62.5	70.0	17.5	80.0	86.0	87.5	93
2023/24	80	64.8	18.4	0	45.6	59.5	67.5	16.8	76.2	85.1	89.0	95

MA301: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	42				2	7	12	21					4.8	16.7	28.6	50.0
2020/21	53		2	1	7	6	13	24			3.8	1.9	13.2	11.3	24.5	45.3
2021/22	35	1	1		3	10	11	9	2.9	2.9			8.6	28.6	31.4	25.7
2022/23	52	1	5		3	3	12	28	1.9	9.6			5.8	5.8	23.1	53.8
2023/24	80		6		7	7	28	32		7.5			8.8	8.8	35.0	40.0

MA301: Grade summary – Count and Percentage distribution (%).

## MA324: Mathematical Modelling and Simulation



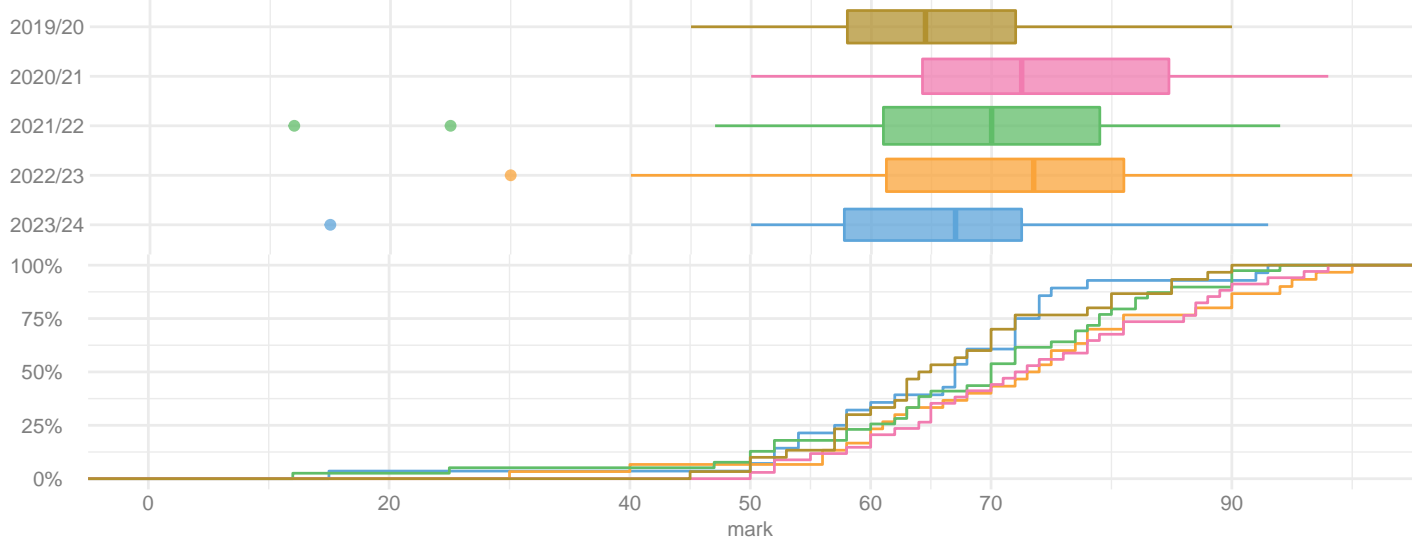
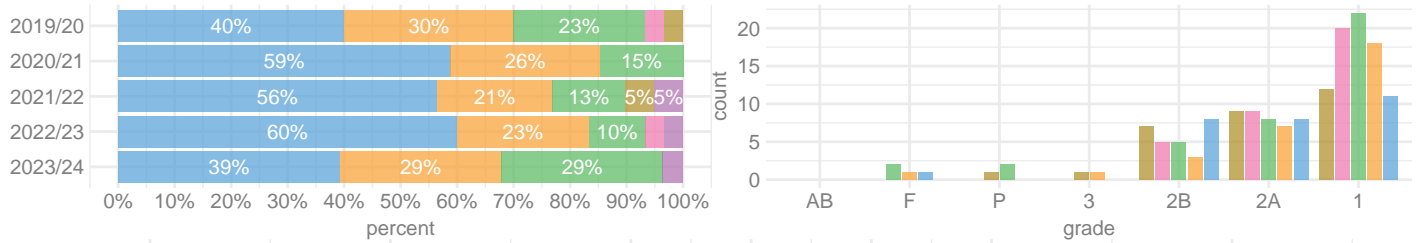
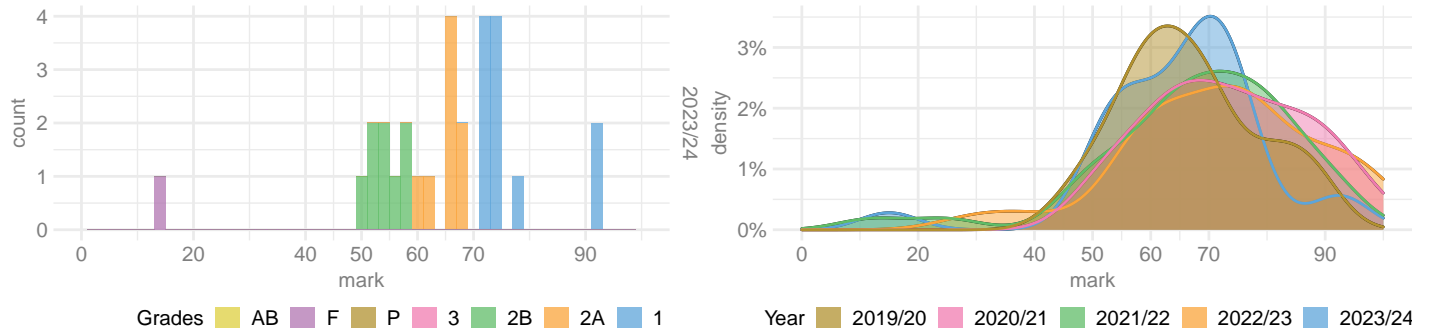
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20												
2020/21												
2021/22												
2022/23	27	65.0	17.2	3	48.8	60.0	66	15.5	75.5	82.2	84.0	90
2023/24	41	59.0	10.2	40	45.0	50.0	60	16.0	66.0	73.0	74.0	77

MA324: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20																
2020/21																
2021/22																
2022/23	27		1	2	2	1	8	13		3.7	7.4	7.4	3.7	29.6	48.1	
2023/24	42	1			6	14	13	8	2.4			14.3	33.3	31.0	19.0	

MA324: Grade summary – Count and Percentage distribution (%).

## MA323: Computational Methods in Financial Mathematics



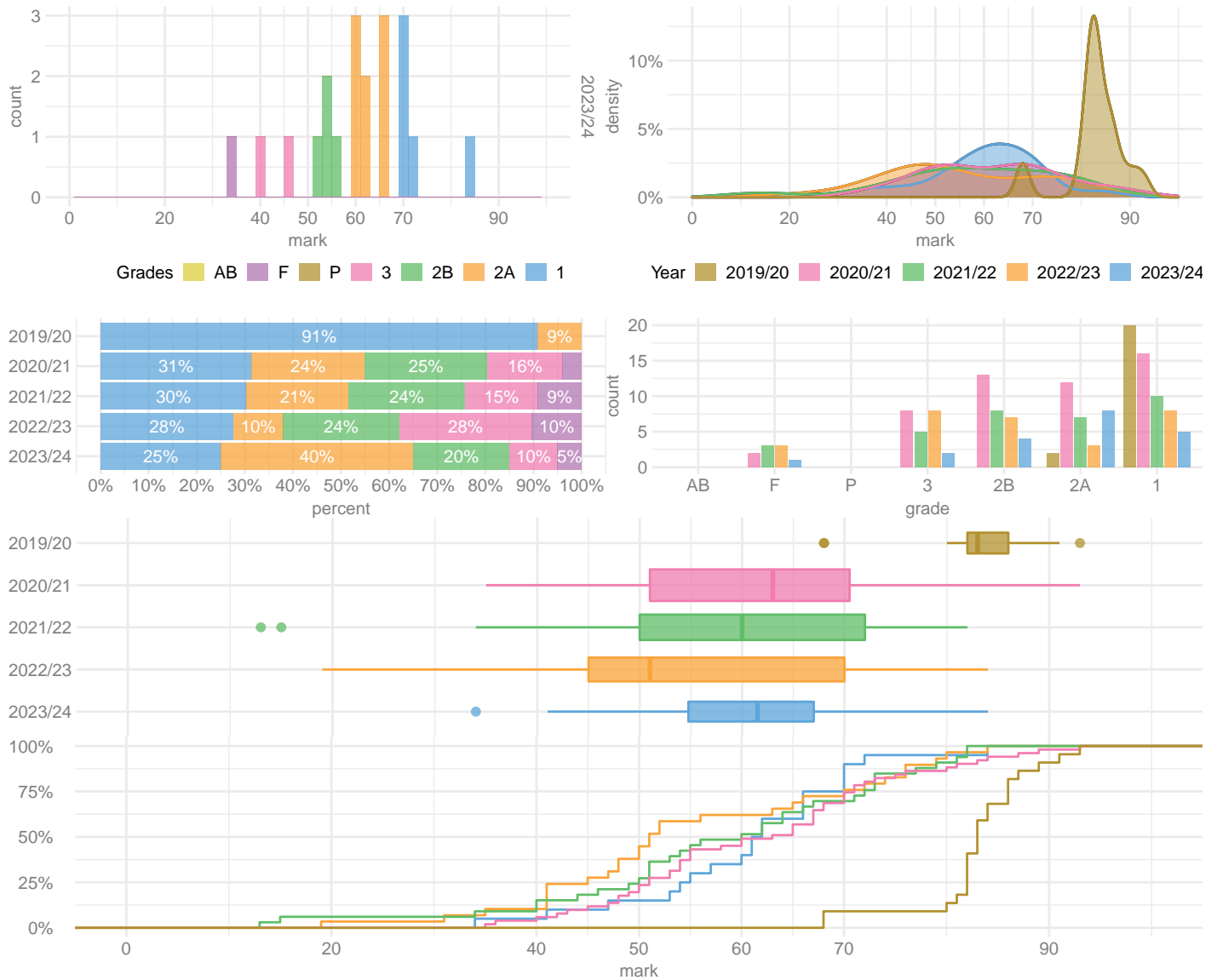
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	30	66.7	11.8	45	52.7	58.0	64.5	14.0	72.0	85.0	86.6	90
2020/21	34	73.2	13.3	50	55.9	64.2	72.5	20.5	84.8	89.7	94.0	98
2021/22	39	67.9	16.8	12	50.0	61.0	70.0	18.0	79.0	86.0	90.0	94
2022/23	30	72.2	16.3	30	56.0	61.2	73.5	19.8	81.0	94.1	96.1	100
2023/24	28	65.1	14.6	15	52.0	57.8	67.0	14.8	72.5	75.9	87.1	93

MA323: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	30			1	1	7	9	12				3.3	3.3	23.3	30.0	40.0
2020/21	34					5	9	20						14.7	26.5	58.8
2021/22	39		2	2		5	8	22		5.1	5.1			12.8	20.5	56.4
2022/23	30		1		1	3	7	18		3.3		3.3		10.0	23.3	60.0
2023/24	28		1			8	8	11		3.6				28.6	28.6	39.3

MA323: Grade summary – Count and Percentage distribution (%).

## MA321: Measure Theoretic Probability



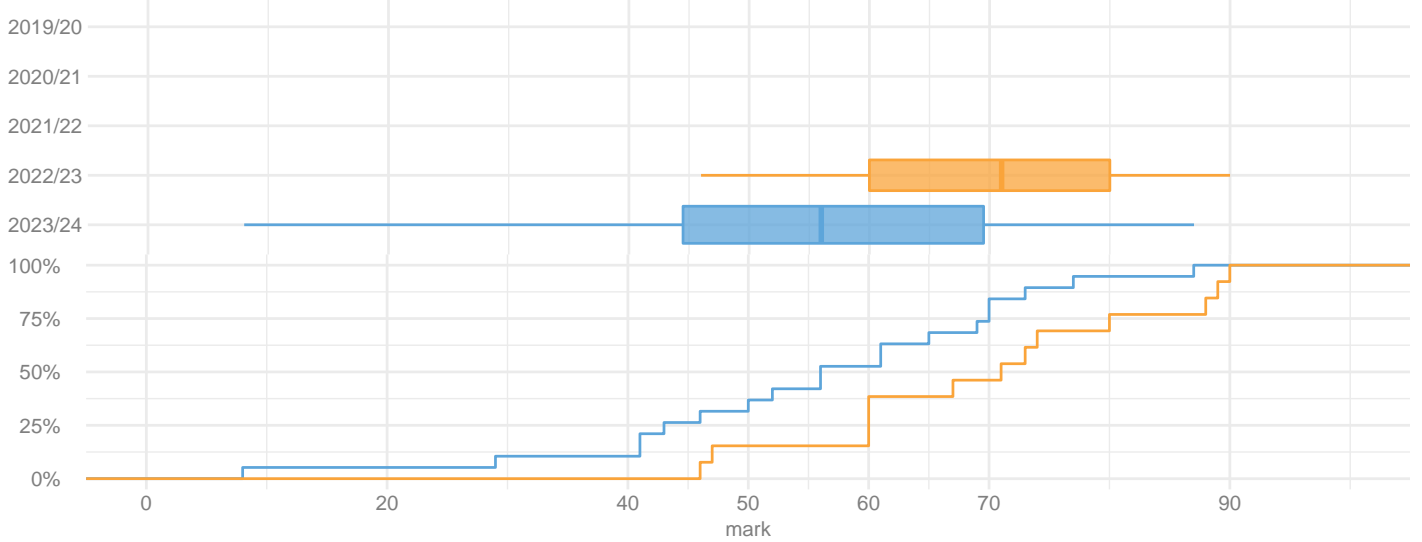
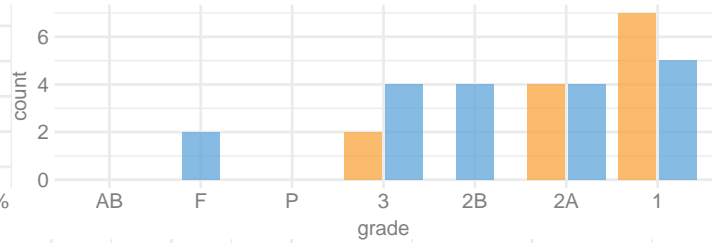
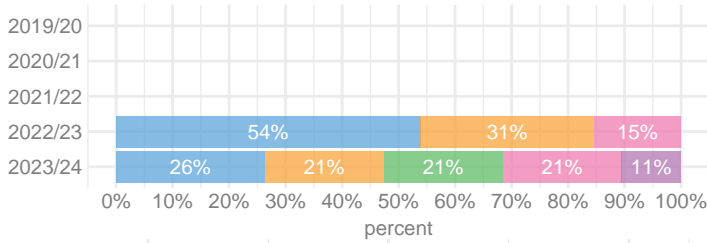
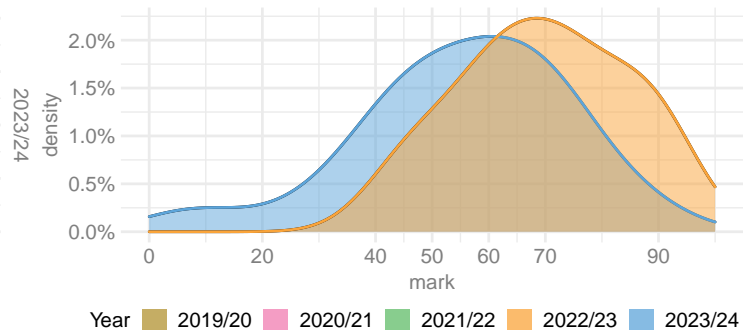
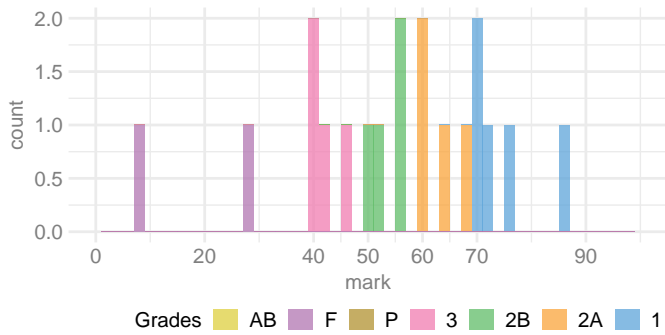
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	22	83.0	5.8	68	80.1	82.0	83.0	4.0	86.0	88.8	90.9	93
2020/21	51	61.8	14.0	35	45.0	51.0	63.0	19.5	70.5	81.0	85.5	93
2021/22	33	57.9	17.3	13	40.0	50.0	60.0	22.0	72.0	78.6	81.4	82
2022/23	29	55.3	16.4	19	39.8	45.0	51.0	25.0	70.0	76.6	79.6	84
2023/24	20	60.5	11.4	34	46.4	54.8	61.5	12.2	67.0	70.2	72.6	84

MA321: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	22						2	20							9.1	90.9
2020/21	51		2		8	13	12	16		3.9		15.7	25.5	23.5	31.4	
2021/22	33		3		5	8	7	10		9.1		15.2	24.2	21.2	30.3	
2022/23	29		3		8	7	3	8		10.3		27.6	24.1	10.3	27.6	
2023/24	20		1		2	4	8	5		5.0		10.0	20.0	40.0	25.0	

MA321: Grade summary – Count and Percentage distribution (%).

## MA330: Game Theory for Collective Decisions



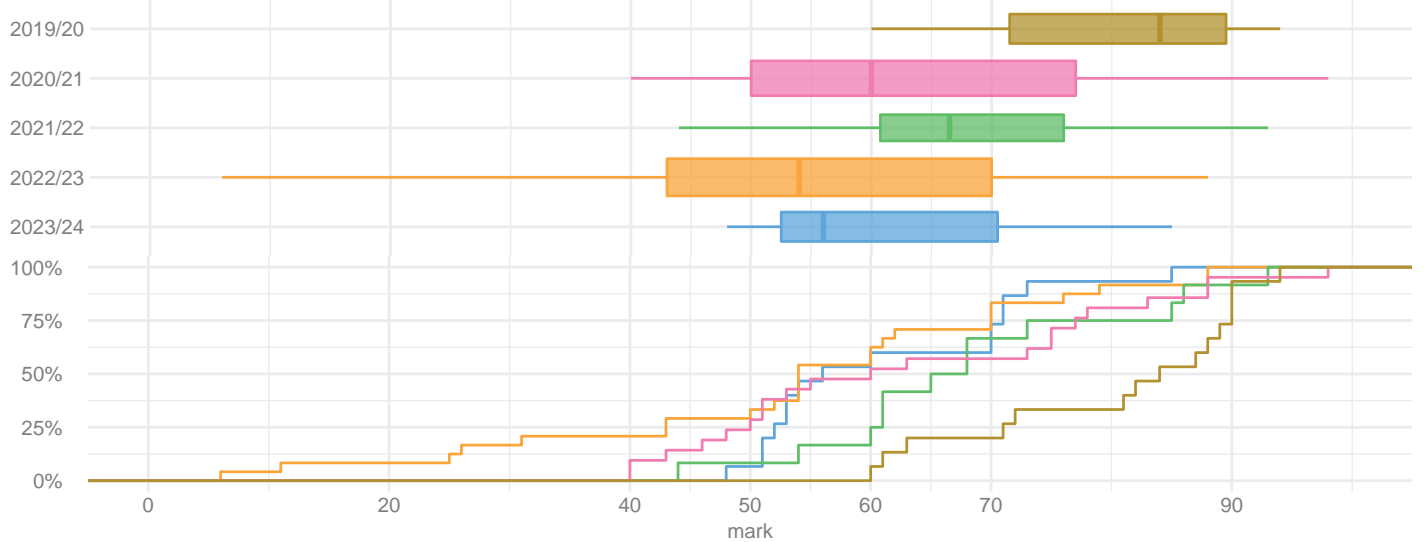
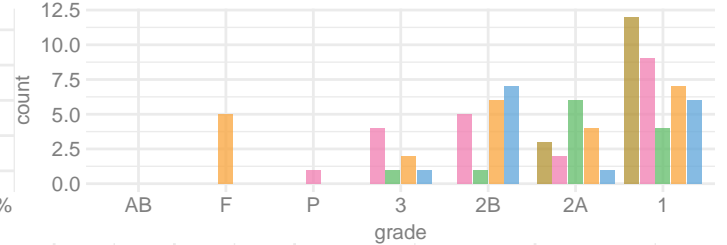
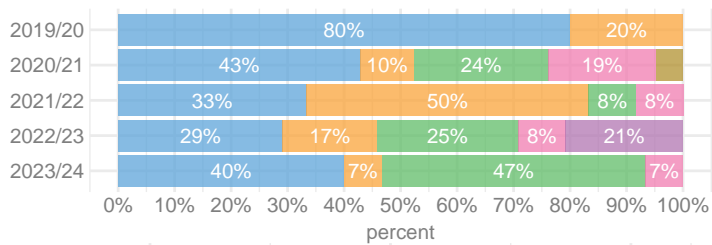
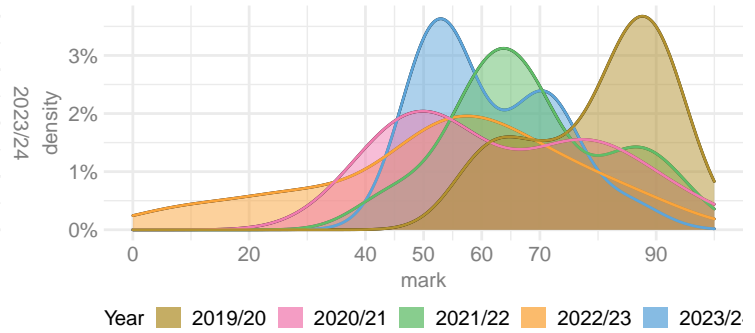
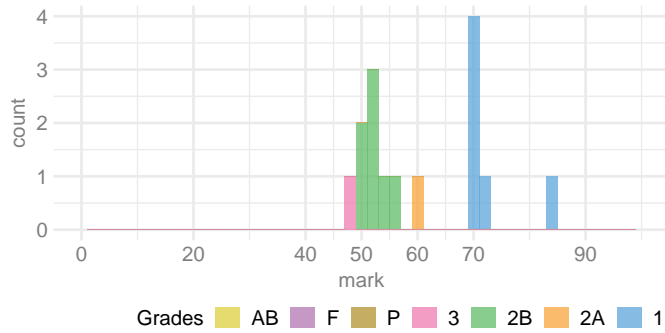
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20												
2020/21												
2021/22												
2022/23	13	69.6	14.8	46	49.6	60.0	71	20.0	80.0	88.8	89.4	90
2023/24	19	55.5	18.5	8	38.6	44.5	56	25.0	69.5	73.8	78.0	87

MA330: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20																
2020/21																
2021/22																
2022/23	13				2		4	7					15.4		30.8	53.8
2023/24	19		2		4	4	4	5		10.5			21.1	21.1	21.1	26.3

MA330: Grade summary – Count and Percentage distribution (%).

## MA317: Complex Analysis



Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	15	80.1	11.7	60	61.8	71.5	84.0	18.0	89.5	90.0	91.2	94
2020/21	21	63.6	17.7	40	43.0	50.0	60.0	27.0	77.0	88.0	88.0	98
2021/22	12	68.2	14.2	44	54.6	60.8	66.5	15.2	76.0	85.9	89.2	93
2022/23	24	53.6	21.8	6	25.3	43.0	54.0	27.0	70.0	78.1	86.6	88
2023/24	15	61.2	11.1	48	51.0	52.5	56.0	18.0	70.5	72.2	76.6	85

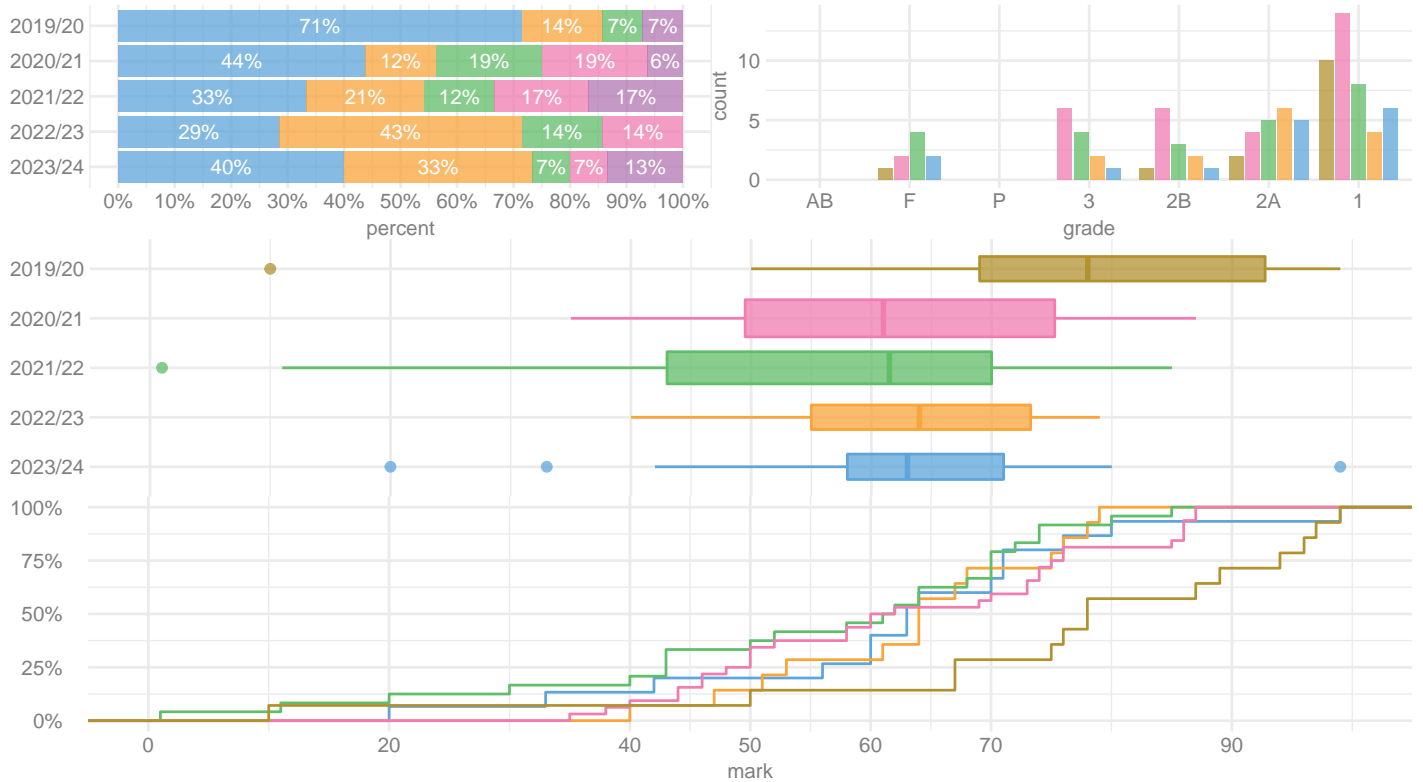
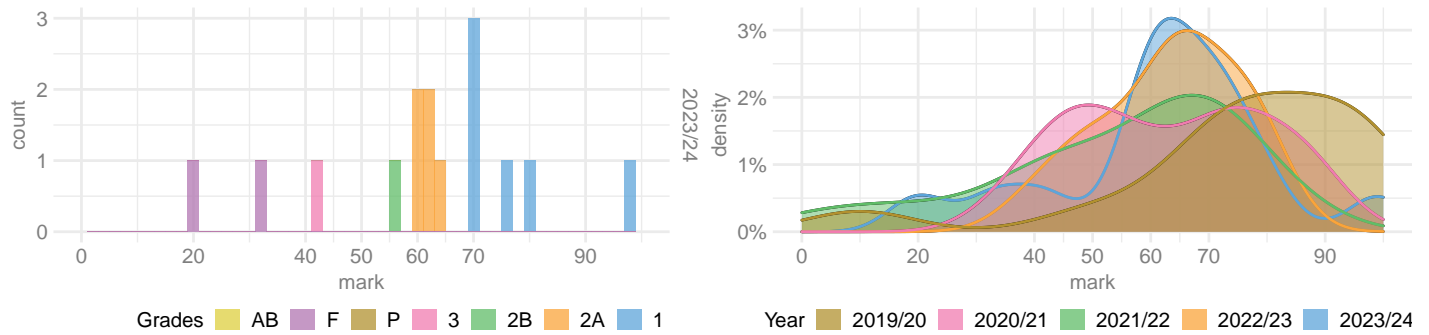
MA317: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	15						3	12							20.0	80.0
2020/21	21			1	4	5	2	9			4.8	19.0	23.8	9.5	42.9	
2021/22	12				1	1	6	4				8.3	8.3	50.0	33.3	
2022/23	24		5		2	6	4	7		20.8		8.3	25.0	16.7	29.2	
2023/24	15				1	7	1	6				6.7	46.7	6.7	40.0	

MA317: Grade summary – Count and Percentage distribution (%).



## MA322: Mathematics of Finance and Valuation



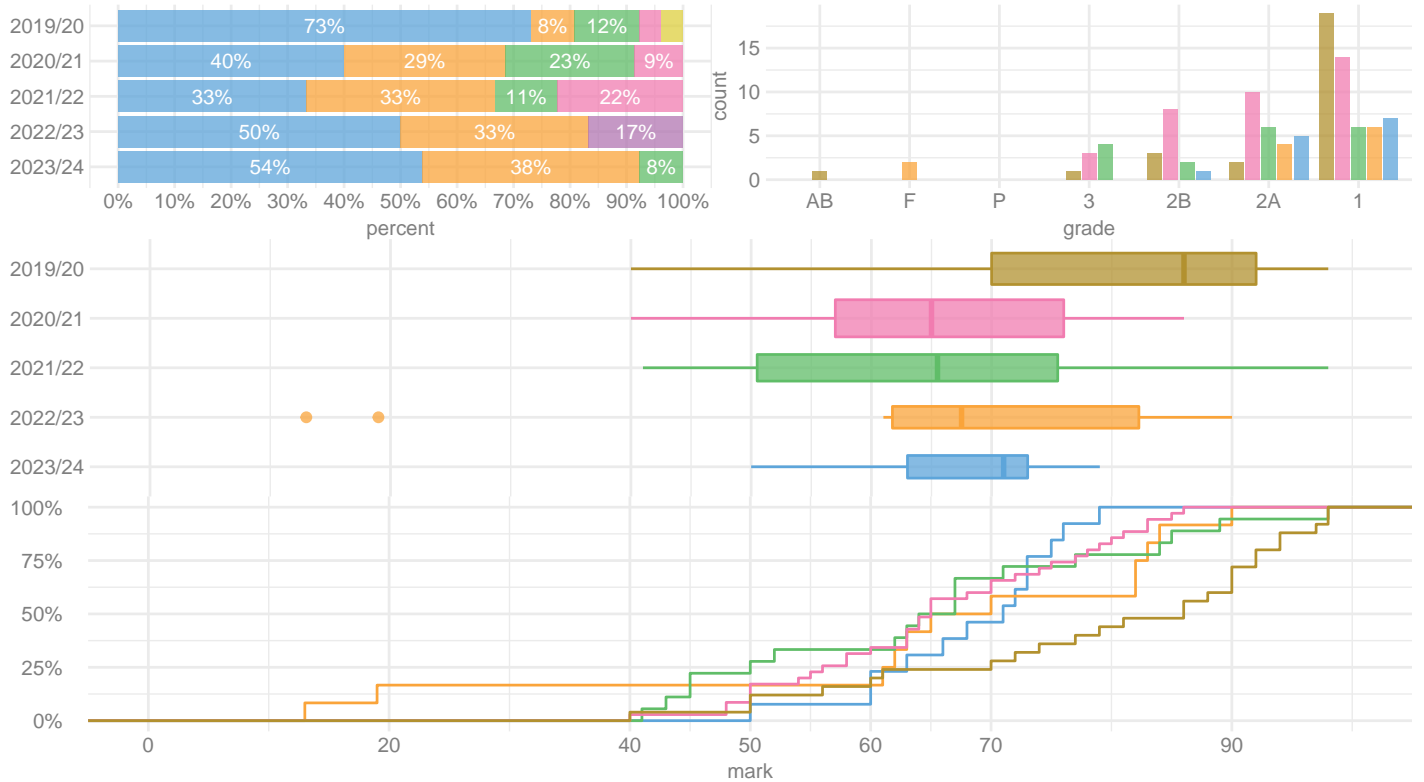
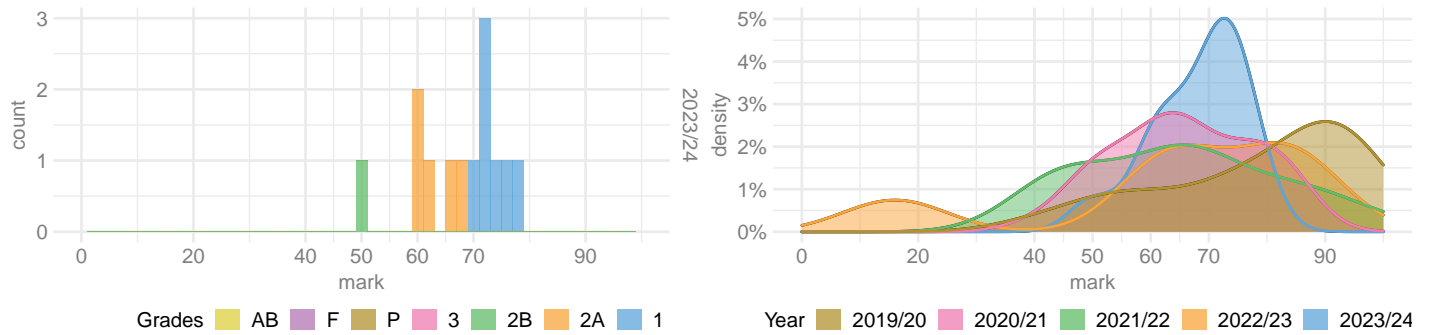
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	14	75.9	23.5	10	55.1	69.0	78.0	23.8	92.8	96.7	97.7	99
2020/21	32	63.1	16.4	35	44.0	49.5	61.0	25.8	75.2	86.0	86.4	87
2021/22	24	54.4	21.9	1	23.0	43.0	61.5	27.0	70.0	74.0	79.1	85
2022/23	14	63.4	12.0	40	48.2	55.0	64.0	18.2	73.2	77.4	78.3	79
2023/24	15	61.9	19.2	20	36.6	58.0	63.0	13.0	71.0	78.4	85.7	99

MA322: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	14	1				1	2	10		7.1				7.1	14.3	71.4
2020/21	32	2			6	6	4	14		6.2			18.8	18.8	12.5	43.8
2021/22	24	4			4	3	5	8		16.7			16.7	12.5	20.8	33.3
2022/23	14				2	2	6	4					14.3	14.3	42.9	28.6
2023/24	15		2		1	1	5	6		13.3			6.7	6.7	33.3	40.0

MA322: Grade summary – Count and Percentage distribution (%).

## MA319: Partial Differential Equations



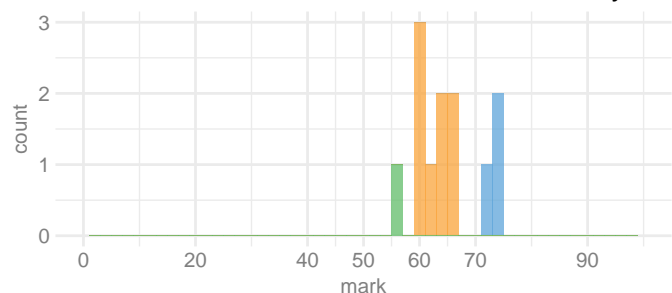
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	25	78.6	17.0	40	52.4	70.0	86.0	22.0	92.0	95.8	97.8	98
2020/21	35	65.7	12.2	40	50.0	57.0	65.0	19.0	76.0	82.2	83.6	86
2021/22	18	65.0	16.9	41	44.4	50.5	65.5	25.0	75.5	86.2	90.3	98
2022/23	12	64.5	24.8	13	23.2	61.8	67.5	20.5	82.2	83.9	86.7	90
2023/24	13	68.2	8.1	50	60.0	63.0	71.0	10.0	73.0	75.8	77.2	79

MA319: Mark summary – Mean, Standard deviation and Quantiles.

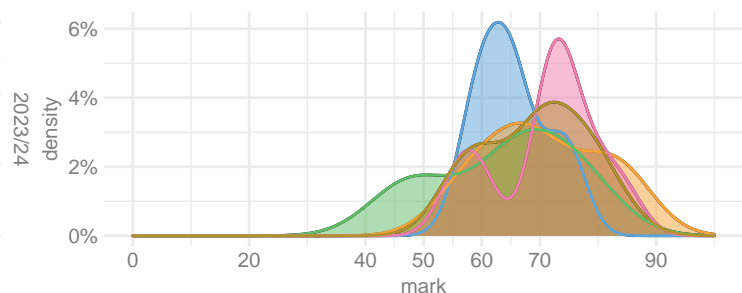
Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	26	1			1	3	2	19	3.8				3.8	11.5	7.7	73.1
2020/21	35				3	8	10	14					8.6	22.9	28.6	40.0
2021/22	18				4	2	6	6					22.2	11.1	33.3	33.3
2022/23	12		2				4	6	16.7						33.3	50.0
2023/24	13					1	5	7						7.7	38.5	53.8

MA319: Grade summary – Count and Percentage distribution (%).

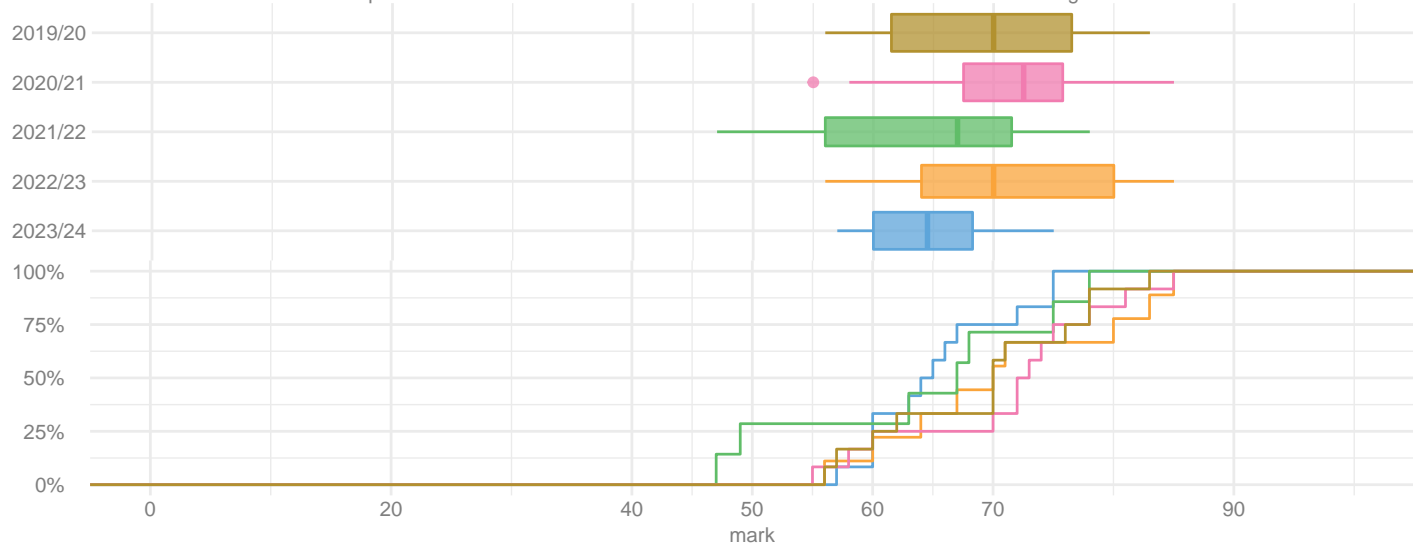
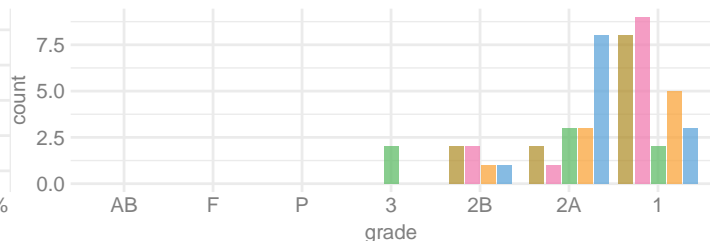
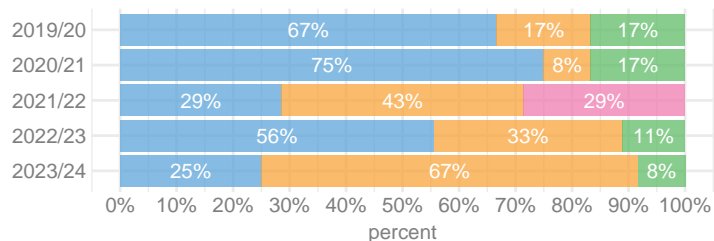
## MA318: History and Culture of Mathematics



Grades AB F P 3 2B 2A 1



Year 2019/20 2020/21 2021/22 2022/23 2023/24



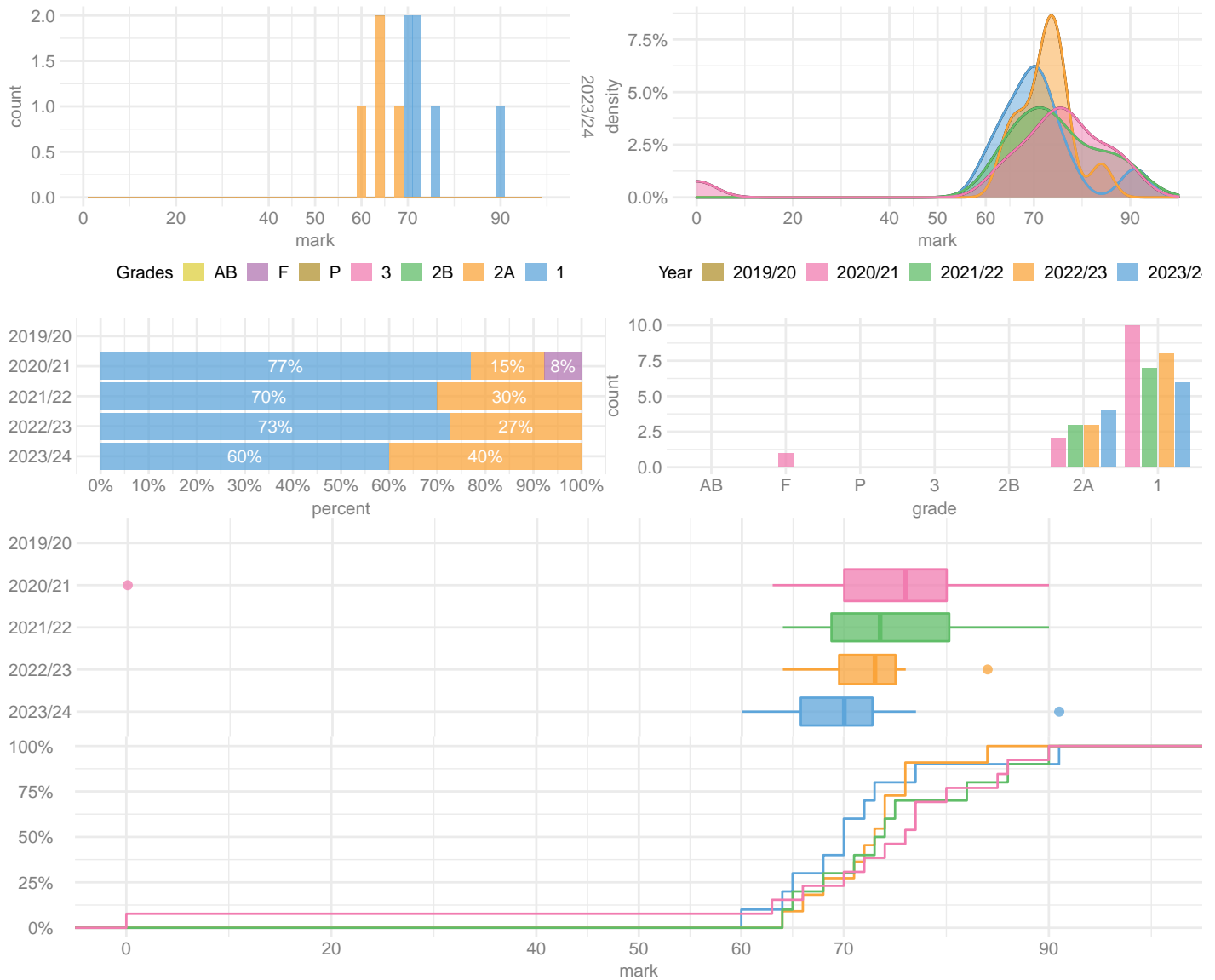
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	12	69.2	8.8	56	57.3	61.5	70.0	15.0	76.5	78.0	80.2	83
2020/21	12	71.1	9.2	55	58.2	67.5	72.5	8.2	75.8	80.7	82.8	85
2021/22	7	63.9	11.9	47	48.2	56.0	67.0	15.5	71.5	76.2	77.1	78
2022/23	9	70.7	10.2	56	59.2	64.0	70.0	16.0	80.0	83.4	84.2	85
2023/24	12	65.3	6.0	57	60.0	60.0	64.5	8.2	68.2	74.7	75.0	75

MA318: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	1	AB	F	P	3	2B	2A	1
2019/20	12					2	2	8						16.7	16.7	66.7
2020/21	12					2	1	9						16.7	8.3	75.0
2021/22	7				2		3	2					28.6		42.9	28.6
2022/23	9					1	3	5						11.1	33.3	55.6
2023/24	12					1	8	3						8.3	66.7	25.0

MA318: Grade summary – Count and Percentage distribution (%).

## MA334: Dissertation in Mathematics



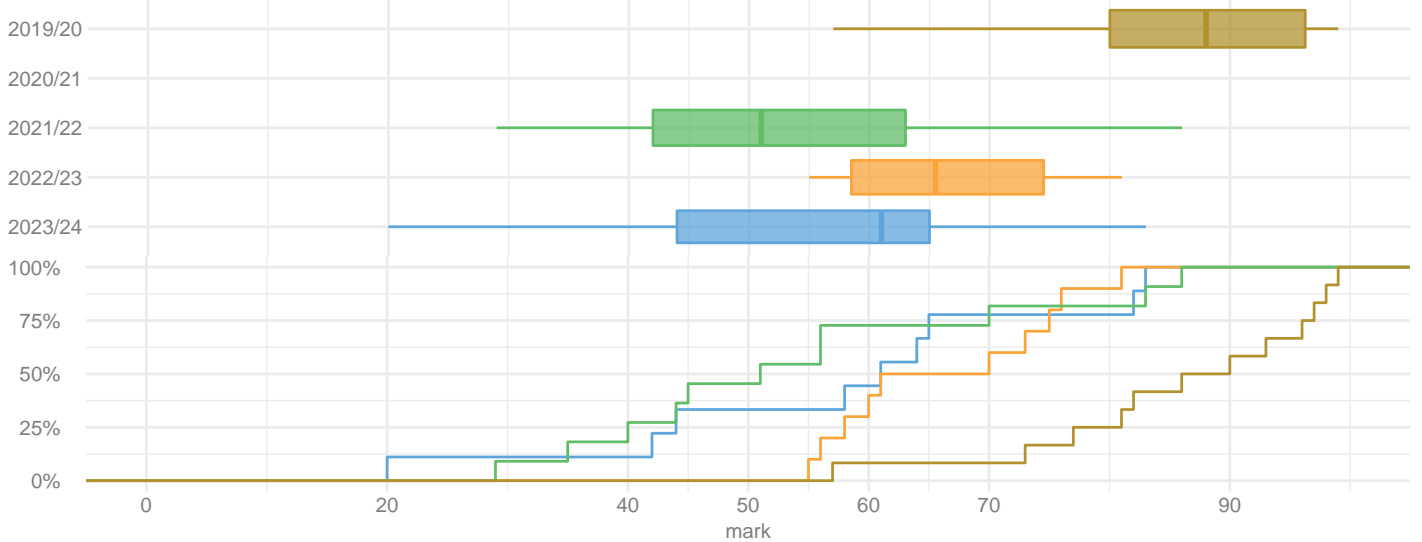
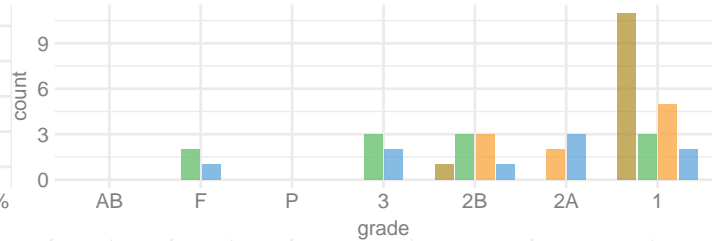
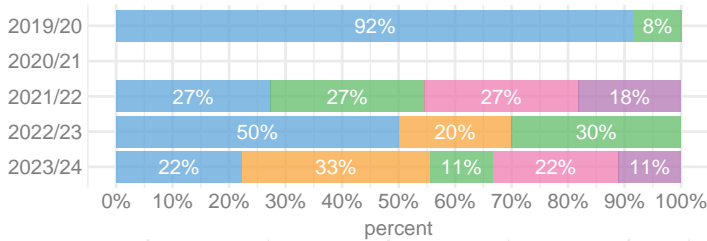
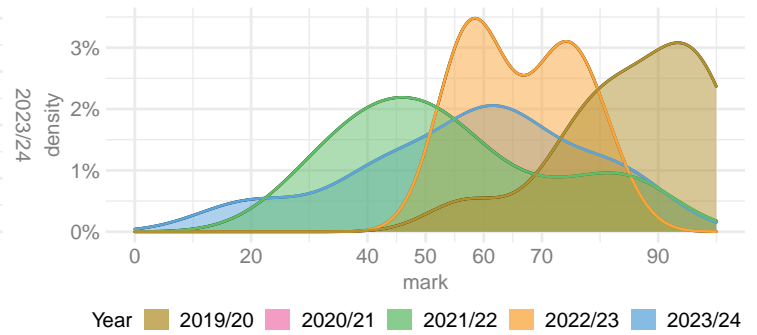
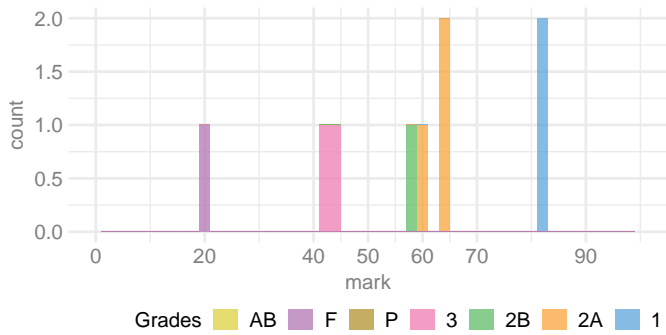
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20												
2020/21	13	70.5	22.5	0	63.6	70.0	76.0	10.0	80.0	85.8	87.6	90
2021/22	10	74.8	8.7	64	64.9	68.8	73.5	11.5	80.2	86.4	88.2	90
2022/23	11	72.5	5.5	64	66.0	69.5	73.0	5.5	75.0	76.0	80.0	84
2023/24	10	71.0	8.6	60	63.6	65.8	70.0	7.0	72.8	78.4	84.7	91

MA334: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20																
2020/21	13		1				2	10			7.7				15.4	76.9
2021/22	10						3	7							30.0	70.0
2022/23	11						3	8							27.3	72.7
2023/24	10						4	6							40.0	60.0

MA334: Grade summary – Count and Percentage distribution (%).

## MA316: Graph Theory



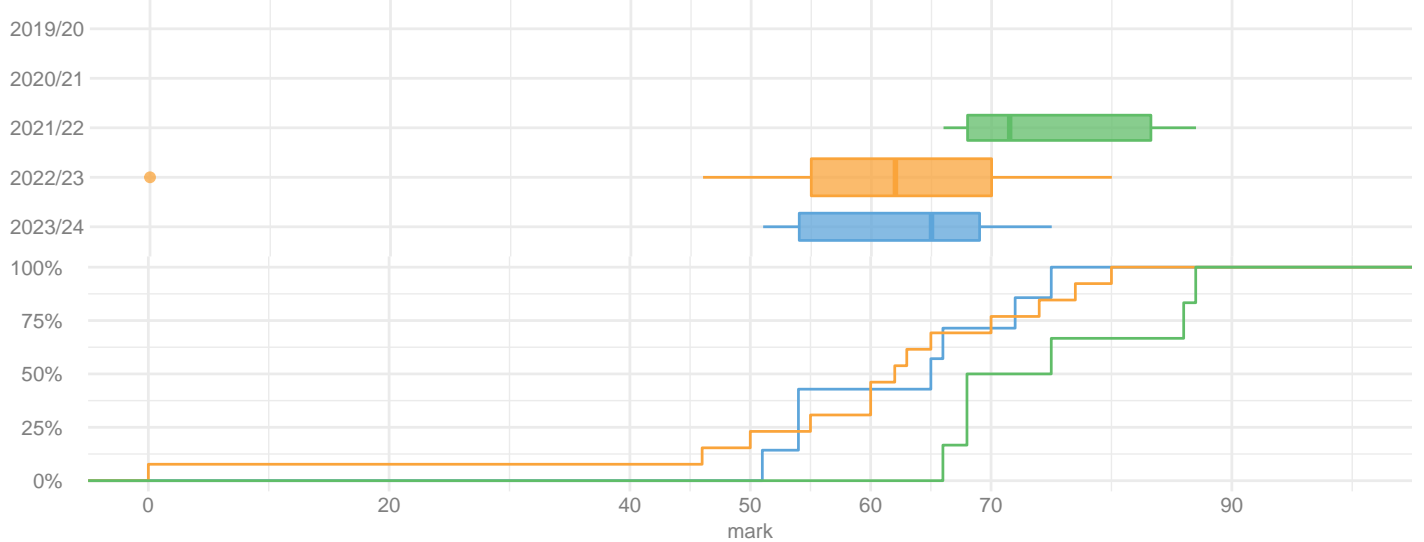
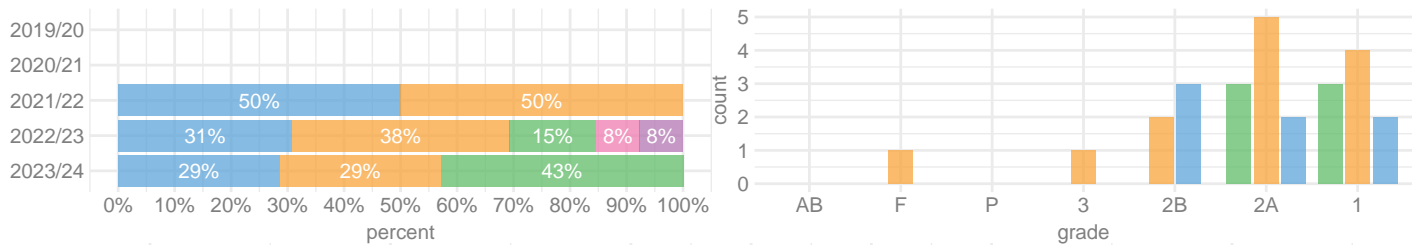
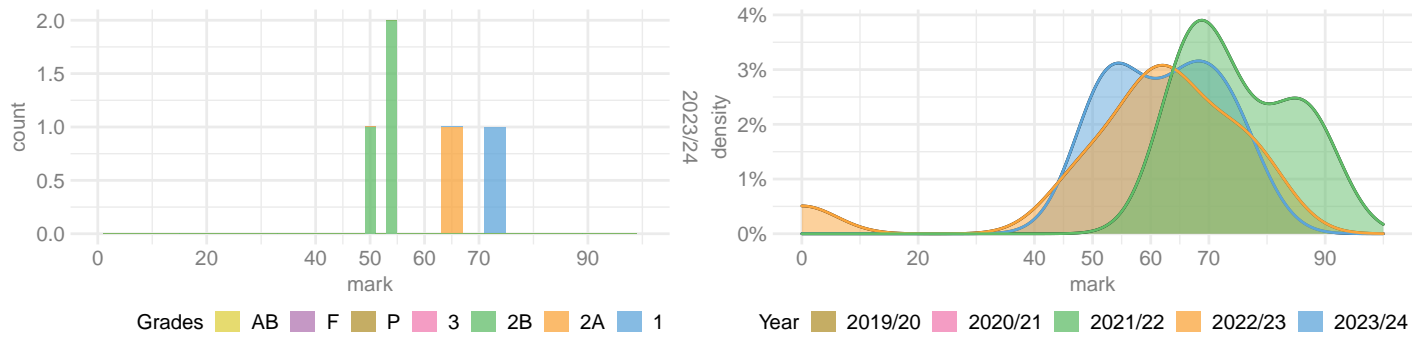
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	12	85.8	12.5	57	73.4	80.0	88.0	16.2	96.2	97.9	98.4	99
2020/21	11	54.1	18.7	29	35.0	42.0	51.0	21.0	63.0	83.0	84.5	86
2022/23	10	66.5	9.5	55	55.9	58.5	65.5	16.0	74.5	76.5	78.8	81
2023/24	9	57.7	20.0	20	37.6	44.0	61.0	21.0	65.0	82.2	82.6	83

MA316: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	12					1		11						8.3		91.7
2020/21																
2021/22	11		2		3	3		3		18.2			27.3	27.3		27.3
2022/23	10					3	2	5						30.0	20.0	50.0
2023/24	9		1		2	1	3	2		11.1			22.2	11.1	33.3	22.2

MA316: Grade summary – Count and Percentage distribution (%).

## MA333: Optimisation for Machine Learning



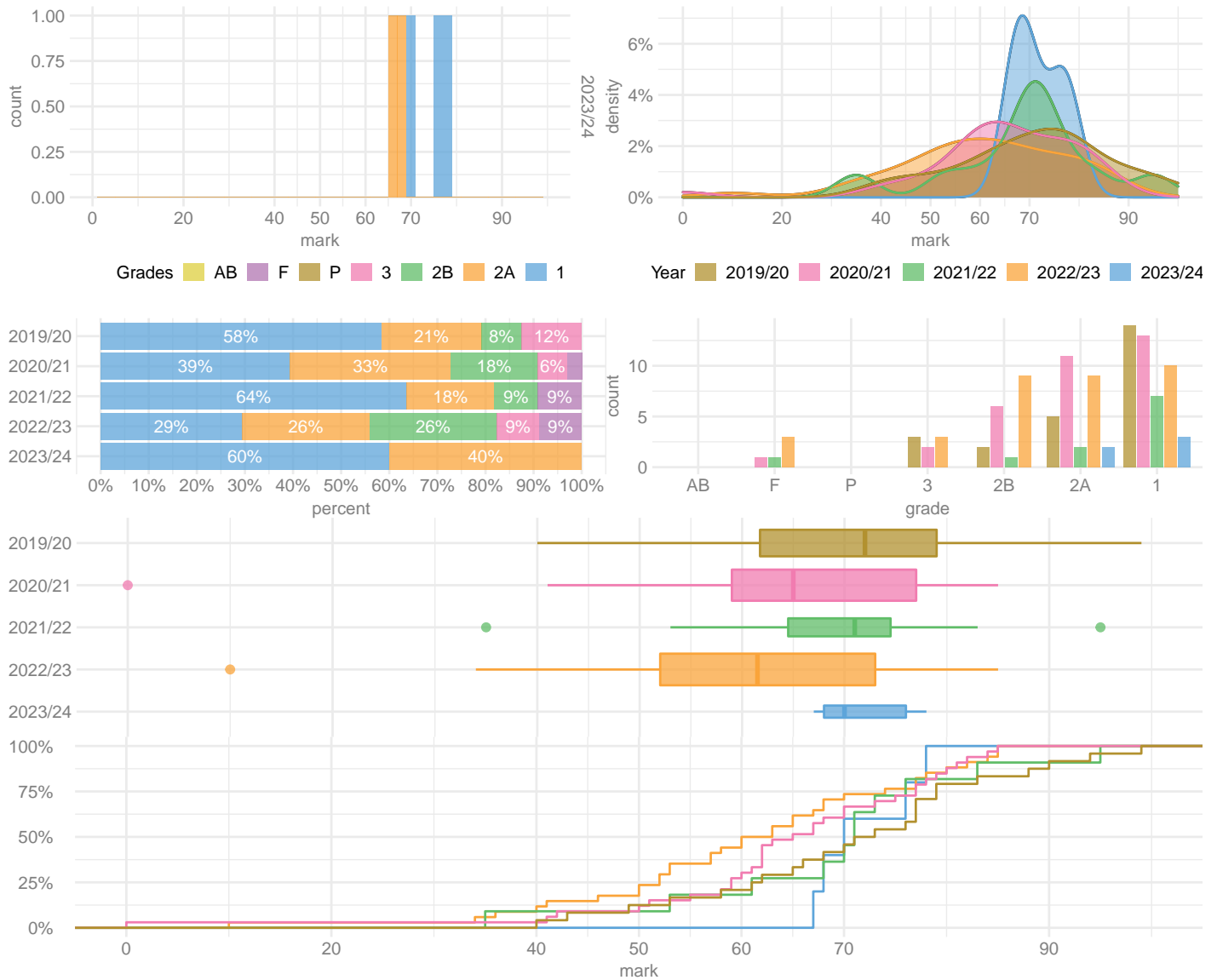
Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20												
2020/21												
2021/22	6	75.0	9.4	66	67.0	68.0	71.5	15.2	83.2	86.5	86.8	87
2022/23	13	58.6	20.2	0	46.8	55.0	62.0	15.0	70.0	76.4	78.2	80
2023/24	7	62.4	9.5	51	52.8	54.0	65.0	15.0	69.0	73.2	74.1	75

MA333: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	1	AB	F	P	3	2B	2A	1
2019/20																
2020/21																
2021/22	6						3	3							50.0	50.0
2022/23	13		1		1	2	5	4		7.7		7.7		15.4	38.5	30.8
2023/24	7					3	2	2						42.9	28.6	28.6

MA333: Grade summary – Count and Percentage distribution (%).

## MA320: Mathematics of Networks



Year	marks	mean	sd	min	q10	q25	median	IQR	q75	q90	q95	max
2019/20	24	70.8	15.2	40	50.2	61.8	72.0	17.2	79.0	89.4	93.4	99
2020/21	33	64.4	16.3	0	50.2	59.0	65.0	18.0	77.0	80.8	82.8	85
2021/22	11	68.7	15.6	35	53.0	64.5	71.0	10.0	74.5	83.0	89.0	95
2022/23	34	60.6	16.8	10	40.3	52.0	61.5	21.0	73.0	81.4	84.3	85
2023/24	5	71.8	4.9	67	67.4	68.0	70.0	8.0	76.0	77.2	77.6	78

MA320: Mark summary – Mean, Standard deviation and Quantiles.

Year	grades	AB	F	P	3	2B	2A	1	%:	AB	F	P	3	2B	2A	1
2019/20	24				3	2	5	14					12.5	8.3	20.8	58.3
2020/21	33		1		2	6	11	13		3.0			6.1	18.2	33.3	39.4
2021/22	11		1			1	2	7		9.1				9.1	18.2	63.6
2022/23	34		3		3	9	9	10		8.8			8.8	26.5	26.5	29.4
2023/24	5						2	3							40.0	60.0

MA320: Grade summary – Count and Percentage distribution (%).