



CHOICE AND PERFORMANCE IN THE SCIENCE SUBJECTS: TRENDS IN MALTA

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READING 2013

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Only one child in six gets five good GCSEs as pupils switch from academic subjects to 'soft' courses

By JAMES CHAPMAN
UPDATED: 12:12 GMT, 8 January 2011



Department for Education

Twice as many students now taking key academic subjects thanks to the EBacc

The Telegraph

GCSE results 2012: children are returning to more traditional subjects

BBC

EBacc 'influencing GCSE subject choices'

By Sean Coughlan
BBC News education correspondent

MailOnline

How 500,000 pupils dodge core GCSE subjects as schools sign them up for softer options

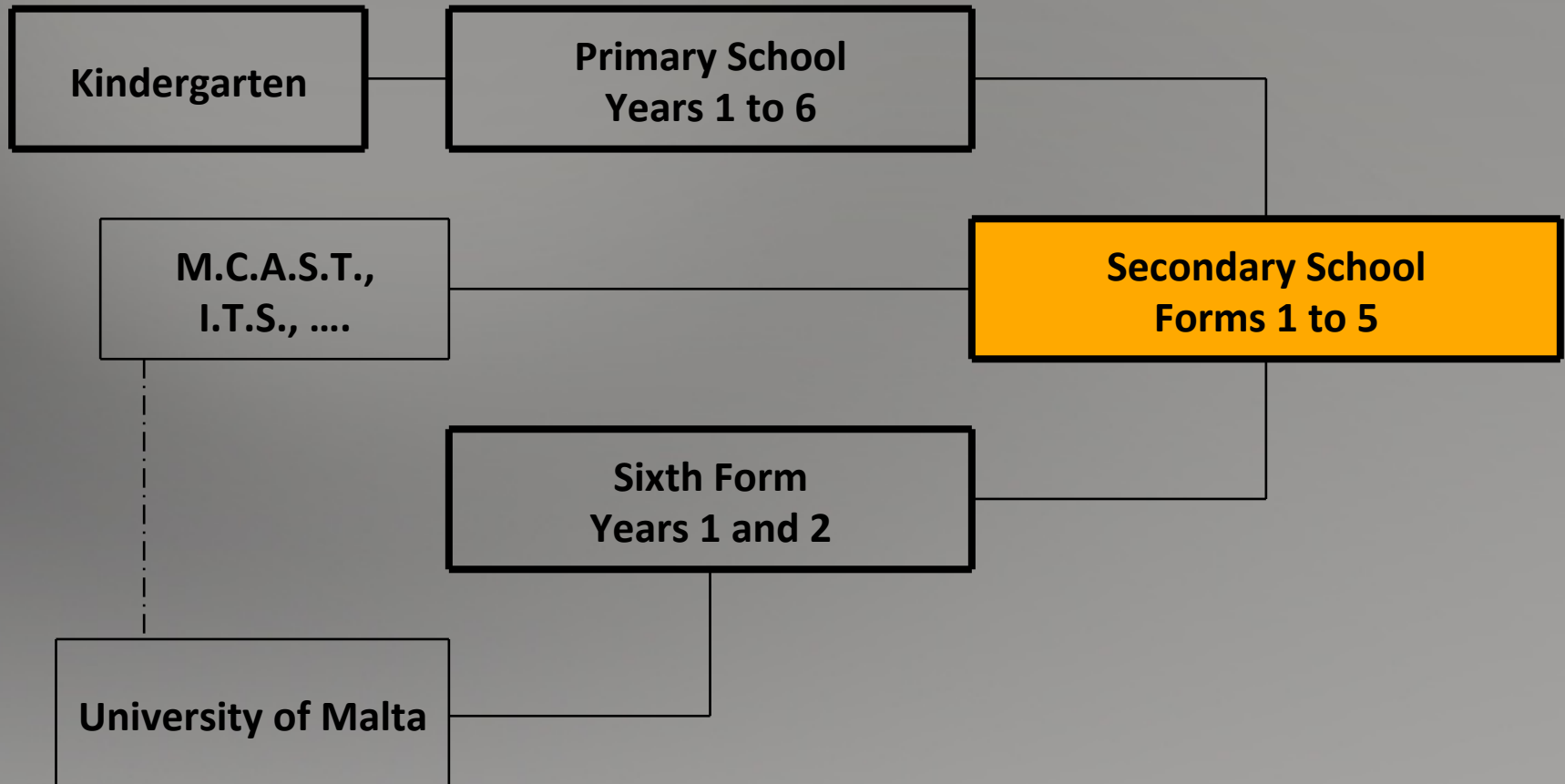
By SARAH HARRIS
UPDATED: 00:11 GMT, 21 January 2012

MailOnline

Taking the soft option: Figures show number of pupils doing GCSEs in traditional subjects fell by half under Labour

By KIRSTY WALKER
UPDATED: 22:49 GMT, 3 January 2012

THE MALTESE EDUCATIONAL SYSTEM

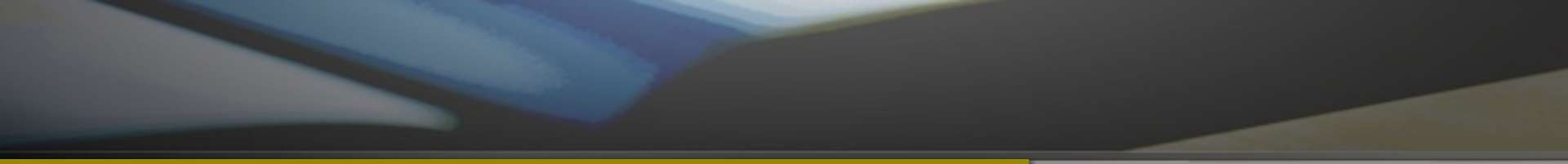


BACKGROUND

- ❖ In Malta, education is compulsory from age 5 to age 16.
- ❖ At the end of compulsory Secondary education, students sit for external examinations: Secondary Education Certificate (SEC) examinations provided by the local national Examinations Board (MATSEC Board of Examinations – University of Malta).
- ❖ The local Secondary Education Certificate (SEC) exams:
 - (i) provide certification to school-leavers, and
 - (ii) provide credentials for access to post-secondary courses.

The Maltese Educational System: SEC and beyond

- ❖ Compulsory subjects for entry to Sixth Form:
SEC passes (grades 1 to 5) in Mathematics, English Language, Maltese and a Science subject (Physics, Chemistry or Biology) ... a minimum of 6 passes.
- ❖ Entry into University courses:
The Matriculation Certificate = 2 Advanced Matriculation (AM) level subjects + 4 Intermediate Matriculation (IM) level subjects (equivalent to one third of an 'A' level) subjects, one of which, Systems of Knowledge, is compulsory.



What does
research say?

Aspirations

The subjects studied in secondary school have a significant influence on the educational and career options available to students.

Students with high ability as well as those with aspirations for future education, are more likely than other students to take up science subjects.

(Fullarton, Walker, Ainley, & Hillman, 2003)

Students with the potential to study science subjects but choose not to, appear to have limited knowledge about future career options and a career in science is perceived as not being very appealing when compared with other higher earning income careers. (Chinnappan, 2007)

The influence of parents, friends and different cultural groups appears to be significant on students choosing to study science in senior years. The views and perceptions of science within the home provide a strong indicator.

Curriculum engagement

- ❖ motivation
- ❖ past experiences
- ❖ teacher advice
- ❖ subject availability

Performance and Ability

Students who struggle with Science in their earlier school years are more likely not to take up the science subjects.

Research shows that the majority of students studying science subjects are drawn from the top two quartiles of achievement. (Fullarton et al., 2003)

Studies have also shown that students' level of success in the middle and early years of schooling regarding participation rates can influence educational intentions and subsequent participation. (Khoo & Ainley, 2005)

Other factors affecting subject choice

- ❖ gender
- ❖ ethnicity
- ❖ ability
- ❖ socioeconomic status
- ❖ school/college size
- ❖ school type grouping practices (i.e. setting by ability)
- ❖ geographical setting
- ❖ subjects taken at GCSE
- ❖ qualifications of teaching staff
- ❖ performance of school/college
- ❖ school status (degree of autonomy of school management)
- ❖ gender ratio of staff
- ❖ urbanicity

Gender

Boys and girls tend to make different choices.

(Pollard, 2003; Murphy and Whitelegg, 2006)

Around age 14, boys are more likely to take separate sciences than girls, when given the choice.

In contrast, girls were more likely than boys to take modern foreign languages.

Ethnicity

Studies (at the EPPI-Centre, that is part of the Social Science Research Unit, Institute of Education, University of London) indicate that young people described as Asian are more likely than those from other ethnic groups to select science and/or mathematics subjects post-16.

The studies in question treat this category as a homogenous group, yet it encompasses people coming from different socio-cultural and ethnic backgrounds. This observation emphasises the complex nature of the problem.



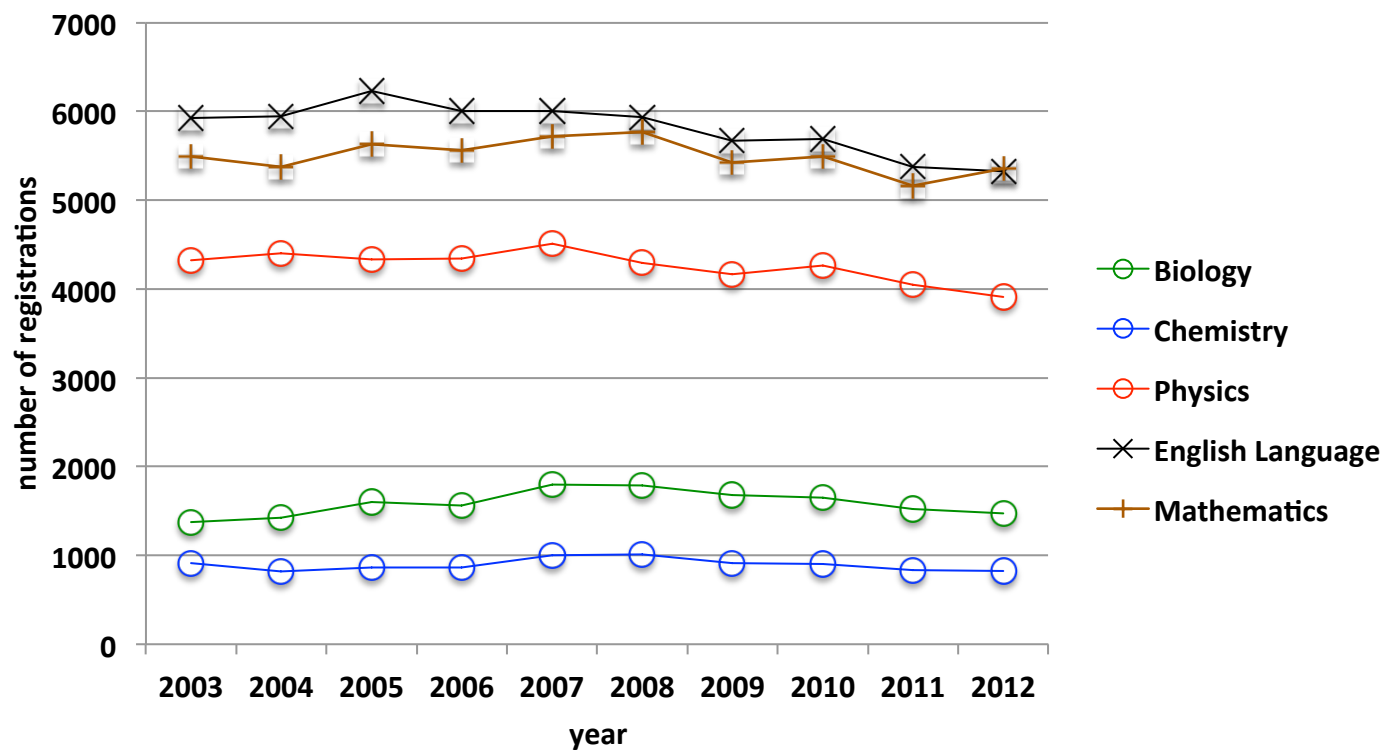
The numbers

The 33 subjects at SEC (16+) level

- **Four compulsory subjects for Sixth Form entry:** English Language, Maltese, Mathematics, one Science subject from Biology, Chemistry, Physics
- **Subject offered to all students:** Religious Knowledge
- **Foreign Languages:** Arabic, French, German, Greek, Italian, Latin, Russian, Spanish
- **Commercial subjects:** Accounting, Business Studies, Commerce, Economics
- **Other options:** Art, Classical Culture & Civilisation, Computer Studies, European Studies (from 2003), Geography, History, Home Economics, Physical Education (from 2004), Technical Design – Graphical Communication / Graphical Communication (from 2008), Technical Design – Technology / Design & Technology (from 2008), Textiles & Design
- **Still other ‘options’:** English Literature, Environmental Studies, Social Studies

Number of registrations per year: The compulsory subjects & the Sciences

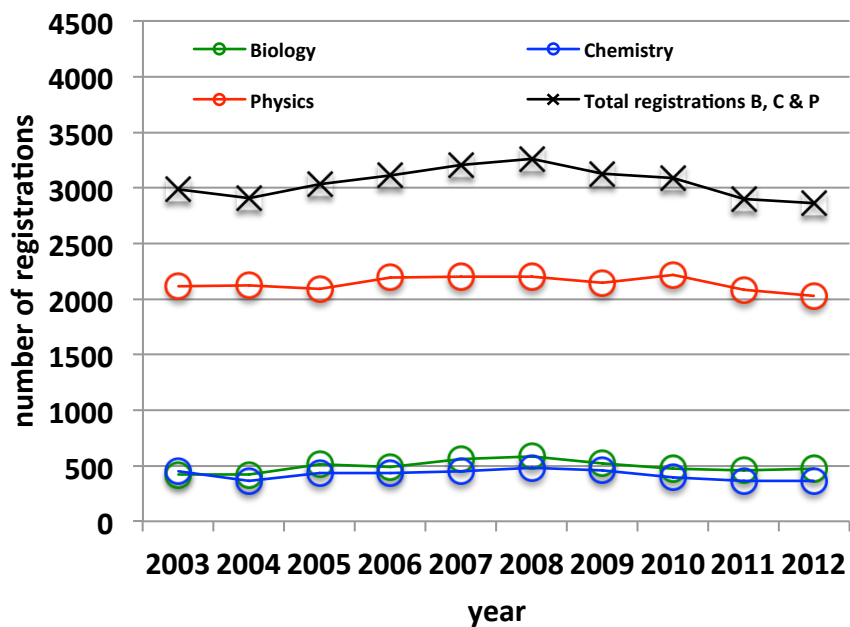
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Biology	1371	1420	1605	1565	1800	1785	1677	1651	1522	1469
Chemistry	911	820	864	863	997	1009	915	908	836	825
Physics	4325	4402	4338	4347	4508	4291	4165	4265	4044	3911
English Language	5923	5941	6229	6002	6006	5933	5674	5692	5371	5326
Maltese	4943	5143	5157	5529	5420	5306	4954	5236	4940	4950
Mathematics	5491	5371	5627	5559	5715	5772	5425	5498	5164	5359
Religious Knowledge	4542	4744	4912	4837	4794	4573	4362	4316	4115	3987



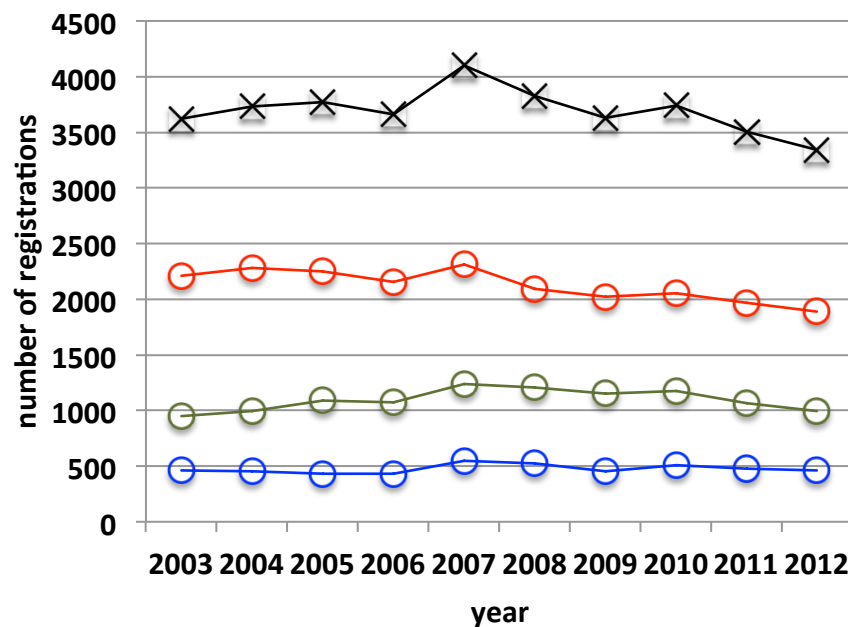
The Sciences: number of yearly registrations by gender

	Males										Females									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Biology	421	422	514	489	558	580	522	473	458	471	950	998	1091	1076	1242	1205	1155	1178	1064	998
Chemistry	453	365	431	431	450	482	458	398	361	366	458	455	433	432	547	527	457	510	475	459
Physics	2111	2119	2091	2193	2197	2200	2145	2213	2080	2025	2214	2283	2247	2154	2311	2091	2020	2052	1964	1886
Total registrations B, C & P	2985	2906	3036	3113	3205	3262	3125	3084	2899	2862	3622	3736	3771	3662	4100	3823	3632	3740	3503	3343

Males

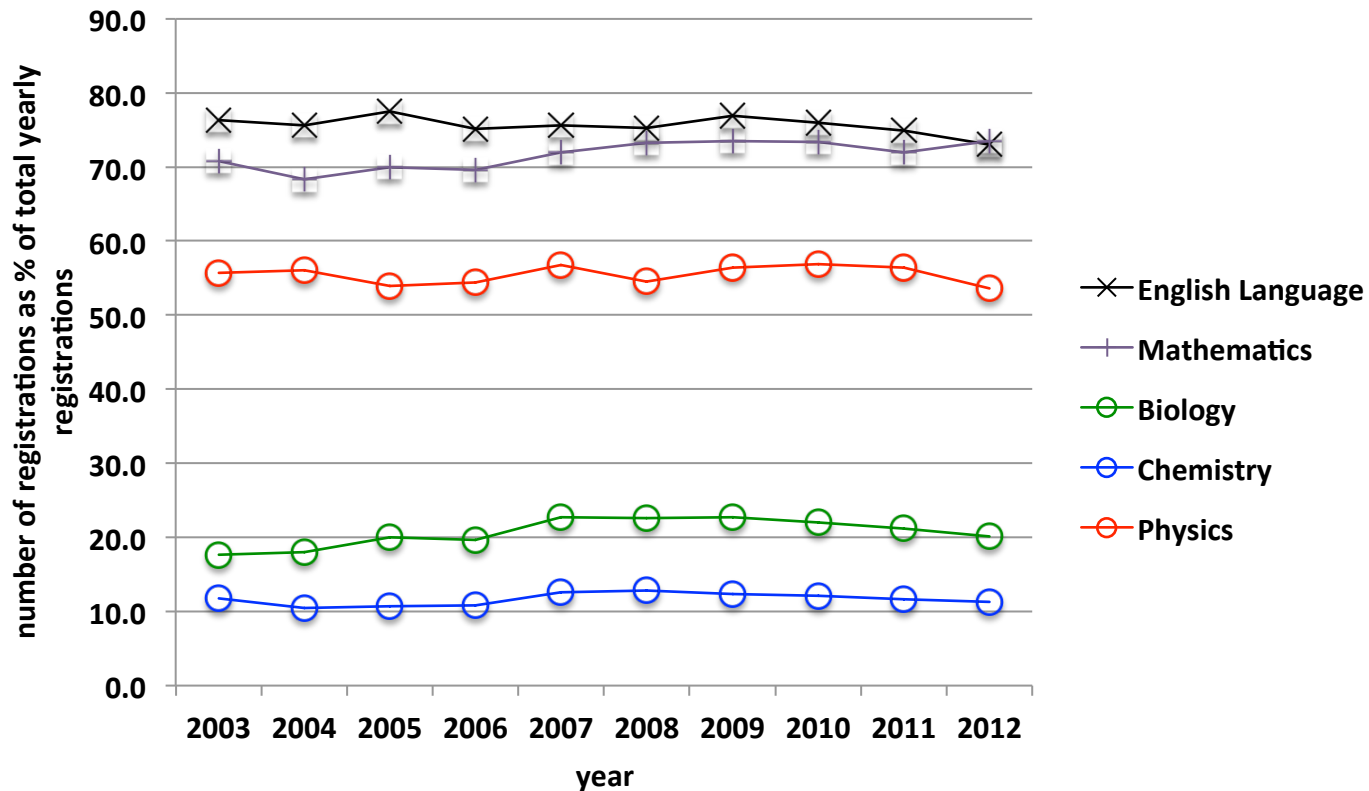


Females



Number of registrations as percentage of total yearly registrations

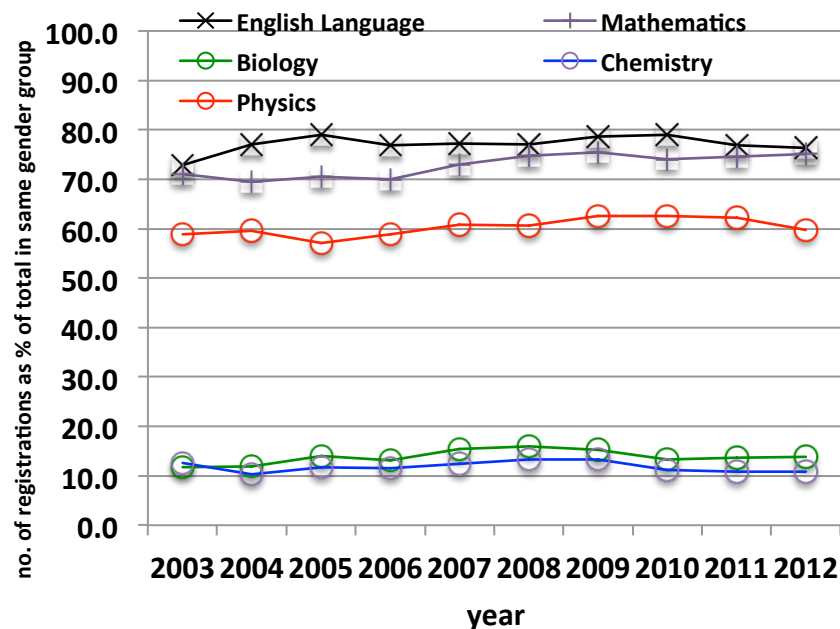
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
English Language	76.3	75.6	77.5	75.2	75.6	75.3	76.9	76.0	74.8	73.0
Mathematics	70.7	68.3	70.0	69.6	72.0	73.3	73.5	73.4	72.0	73.5
Biology	17.7	18.1	20.0	19.6	22.7	22.7	22.7	22.0	21.2	20.1
Chemistry	11.7	10.4	10.7	10.8	12.6	12.8	12.4	12.1	11.6	11.3
Physics	55.7	56.0	54.0	54.5	56.8	54.5	56.5	56.9	56.3	53.6



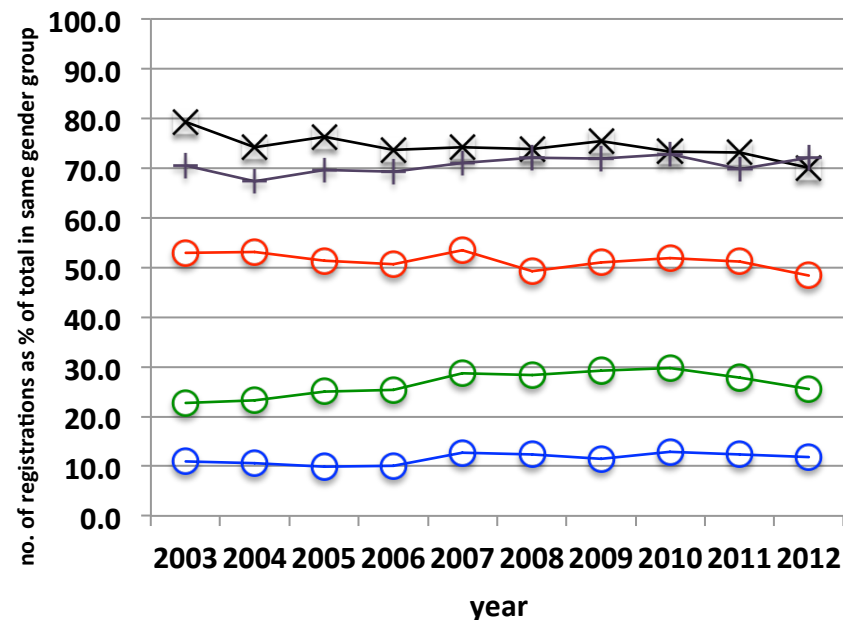
The Sciences, English Language & Mathematics: number of yearly registrations as a percentage (of same gender group) by subject group

	Males										Females									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
English Language	72.9	77.1	79.0	76.8	77.3	77.1	78.6	79.0	76.8	76.4	79.2	74.3	76.3	73.8	74.2	73.8	75.4	73.3	73.1	70.1
Mathematics	71.0	69.5	70.5	70.0	73.0	74.7	75.5	74.0	74.5	75.0	70.5	67.4	69.6	69.3	71.1	72.0	71.9	72.8	69.7	72.1
Biology	11.7	11.9	14.0	13.1	15.4	16.0	15.2	13.4	13.7	13.9	22.7	23.2	24.9	25.3	28.7	28.4	29.2	29.8	27.7	25.6
Chemistry	12.6	10.3	11.8	11.6	12.4	13.3	13.4	11.3	10.8	10.8	11.0	10.6	9.9	10.2	12.6	12.4	11.6	12.9	12.4	11.8
Physics	58.9	59.5	57.1	58.8	60.7	60.6	62.6	62.6	62.2	59.7	53.0	53.1	51.4	50.6	53.4	49.2	51.1	51.9	51.2	48.3

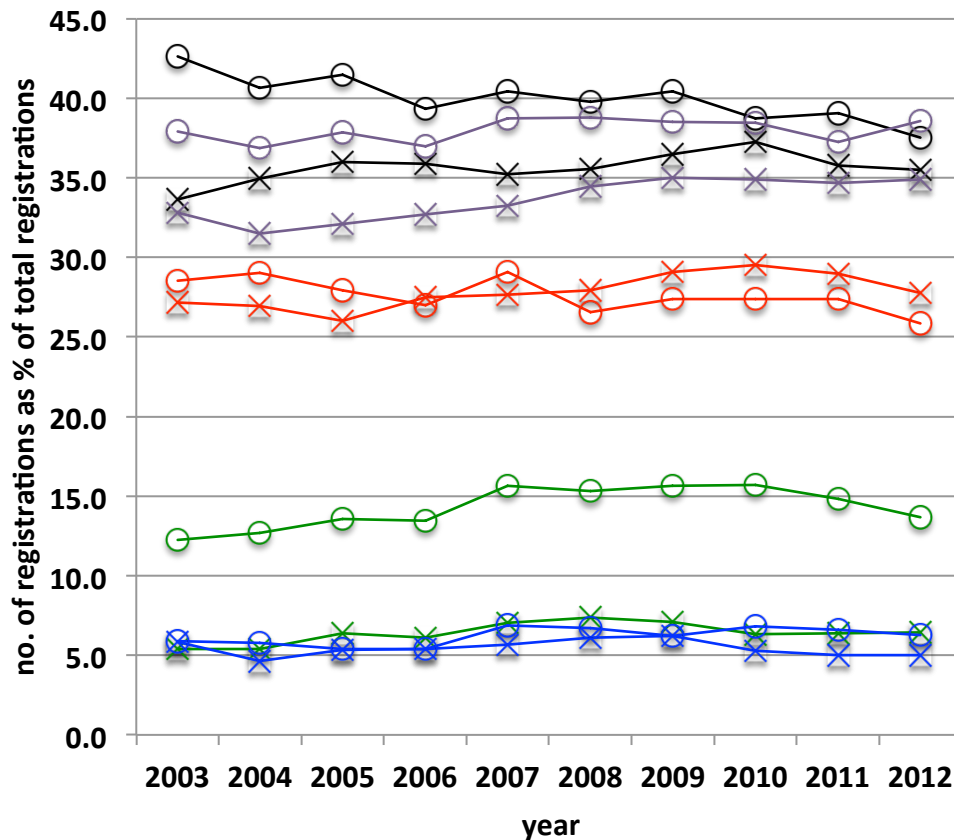
Males



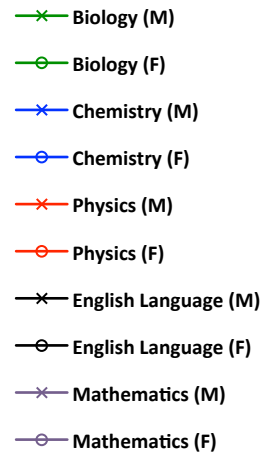
Females



The Sciences, English Language & Mathematics: number of yearly registrations as a percentage (of total registrations)

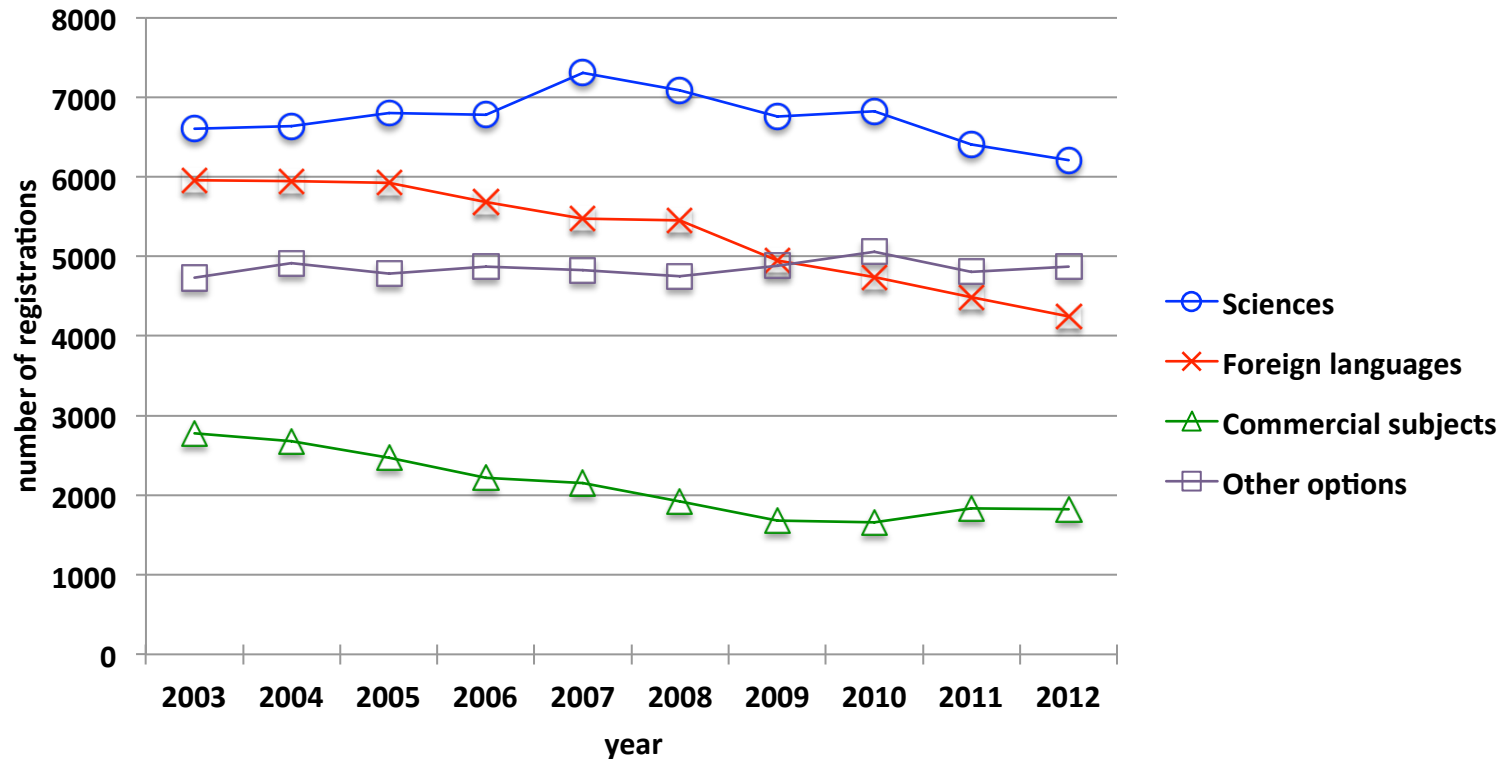


	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Biology (M)	5.4	5.4	6.4	6.1	7.0	7.4	7.1	6.3	6.4	6.5
Biology (F)	12.2	12.7	13.6	13.5	15.6	15.3	15.7	15.7	14.8	13.7
Chemistry (M)	5.8	4.6	5.4	5.4	5.7	6.1	6.2	5.3	5.0	5.0
Chemistry (F)	5.9	5.8	5.4	5.4	6.9	6.7	6.2	6.8	6.6	6.3
English Lang. (M)	33.6	34.9	36.0	35.9	35.2	35.6	36.5	37.3	35.8	35.5
English Lang. (F)	42.6	40.6	41.5	39.3	40.4	39.8	40.4	38.7	39.1	37.5
Mathematics (M)	32.8	31.5	32.1	32.7	33.2	34.4	35.0	34.9	34.7	34.9
Mathematics (F)	37.9	36.9	37.9	37.0	38.7	38.8	38.5	38.5	37.3	38.6
Physics (M)	27.2	27.0	26.0	27.5	27.7	27.9	29.1	29.5	29.0	27.8
Physics (F)	28.5	29.0	28.0	27.0	29.1	26.5	27.4	27.4	27.4	25.9



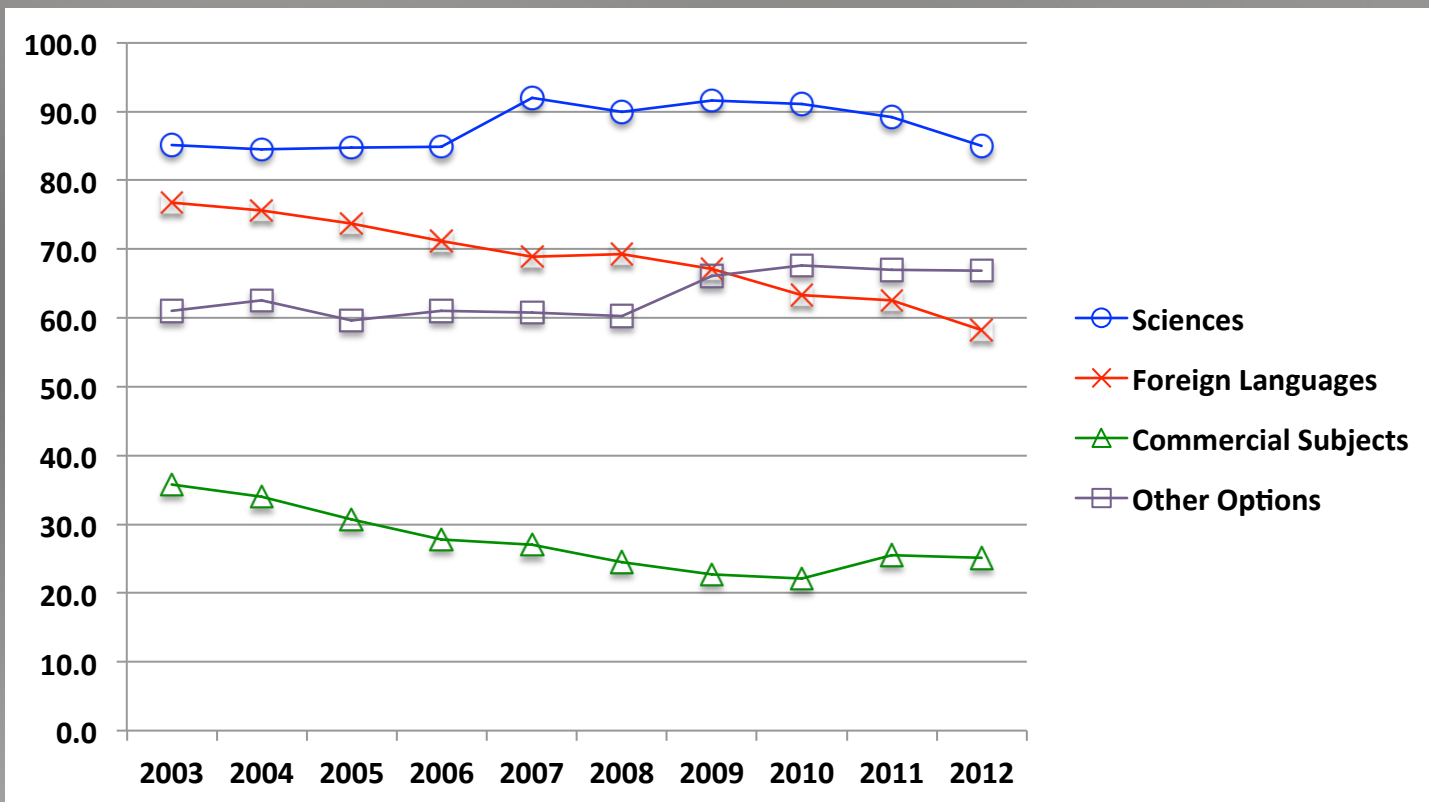
Total number of yearly registrations (N): Groups of subjects

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Sciences	6607	6642	6807	6775	7305	7085	6757	6824	6402	6205
Foreign languages	5958	5947	5921	5680	5471	5458	4947	4739	4489	4244
Commercial subjects	2773	2674	2469	2222	2151	1926	1680	1656	1829	1824
Other options	4733	4918	4788	4871	4831	4751	4879	5063	4808	4876



Total number of yearly registrations expressed as a percentage (%): Groups of subjects

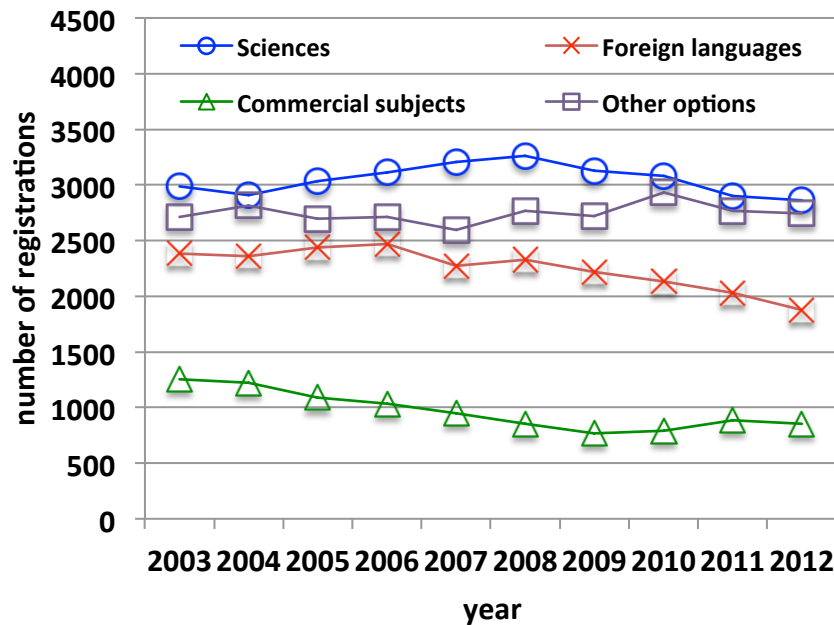
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Sciences	85.1	84.5	84.7	84.9	92.0	89.9	91.6	91.1	89.2	85.1
Foreign Languages	76.7	75.7	73.7	71.2	68.9	69.3	67.1	63.3	62.5	58.2
Commercial Subjects	35.7	34.0	30.7	27.8	27.1	24.4	22.8	22.1	25.5	25.1
Other Options	61.0	62.6	59.6	61.0	60.8	60.3	66.1	67.6	67.0	66.8



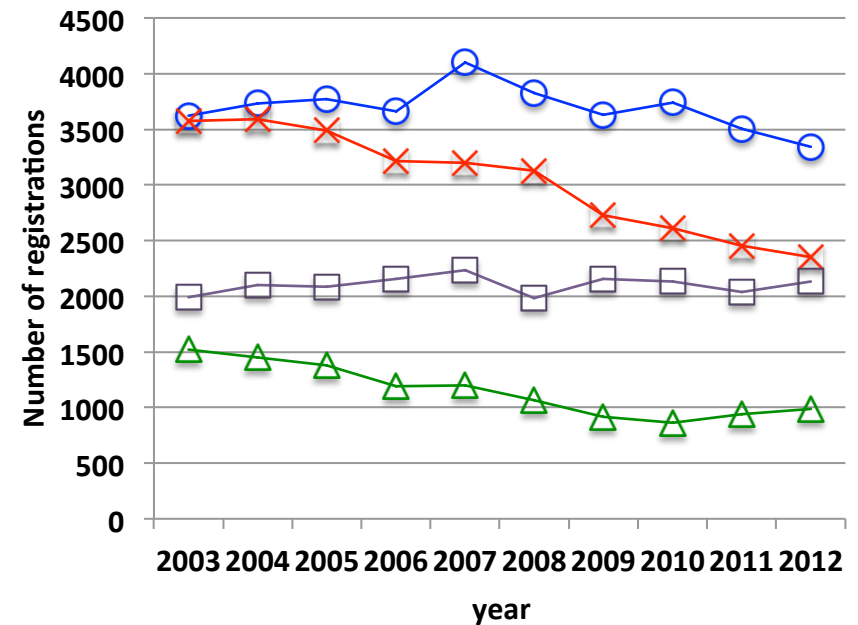
Total number of yearly registrations by gender: Groups of subjects

	Males										Females									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Sciences	2985	2906	3036	3113	3205	3262	3125	3084	2899	2862	3622	3736	3771	3662	4100	3823	3632	3740	3503	3343
Foreign languages	2386	2357	2435	2468	2275	2328	2222	2130	2033	1877	3572	3590	3486	3212	3196	3130	2725	2609	2456	2351
Commercial subjects	1250	1224	1086	1031	951	857	764	793	887	850	1523	1450	1383	1191	1200	1069	916	863	942	984
Other options	2712	2815	2699	2712	2596	2768	2720	2931	2769	2747	1993	2103	2089	2159	2235	1983	2159	2132	2039	2129

Males



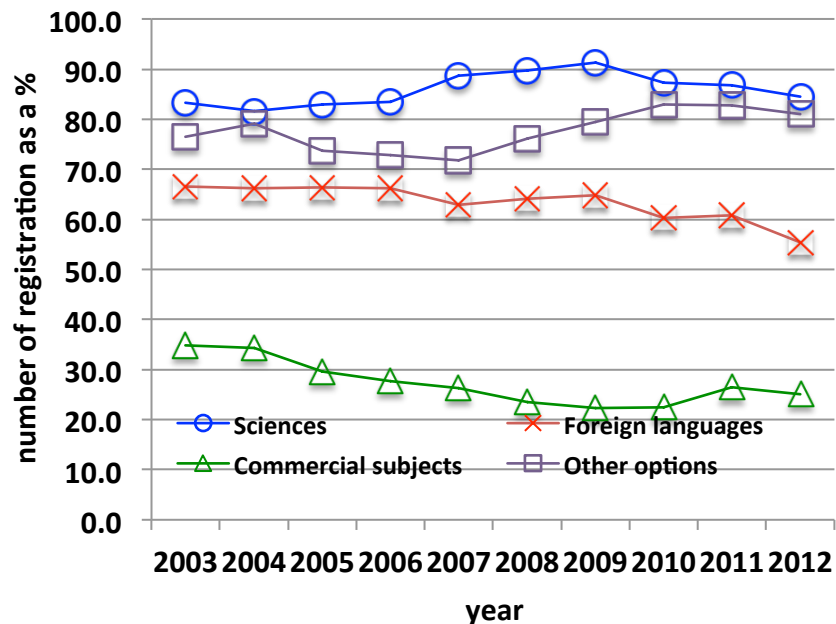
Females



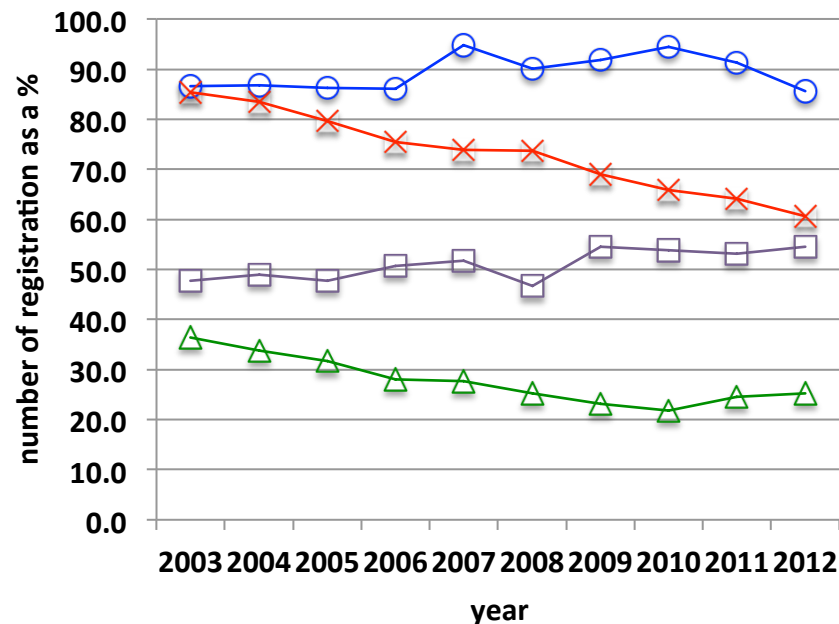
Total number of yearly registrations by gender as a percentage: Groups of subjects

	Males										Females									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Sciences	83.3	81.6	82.9	83.5	88.6	89.8	91.3	87.2	86.7	84.4	86.7	86.9	86.2	86.0	94.8	90.0	91.9	94.5	91.3	85.6
Foreign languages	66.6	66.2	66.5	66.2	62.9	64.1	64.9	60.3	60.8	55.4	85.5	83.5	79.7	75.5	73.9	73.7	68.9	65.9	64.0	60.6
Commercial subjects	34.9	34.4	29.6	27.7	26.3	23.6	22.3	22.4	26.5	25.1	36.4	33.7	31.6	28.0	27.7	25.2	23.2	21.8	24.6	25.2
Other options	76.5	79.1	73.7	72.8	71.8	76.2	79.4	82.9	82.9	81.0	47.7	48.9	47.8	50.7	51.7	46.7	54.6	53.9	53.2	54.5

Males

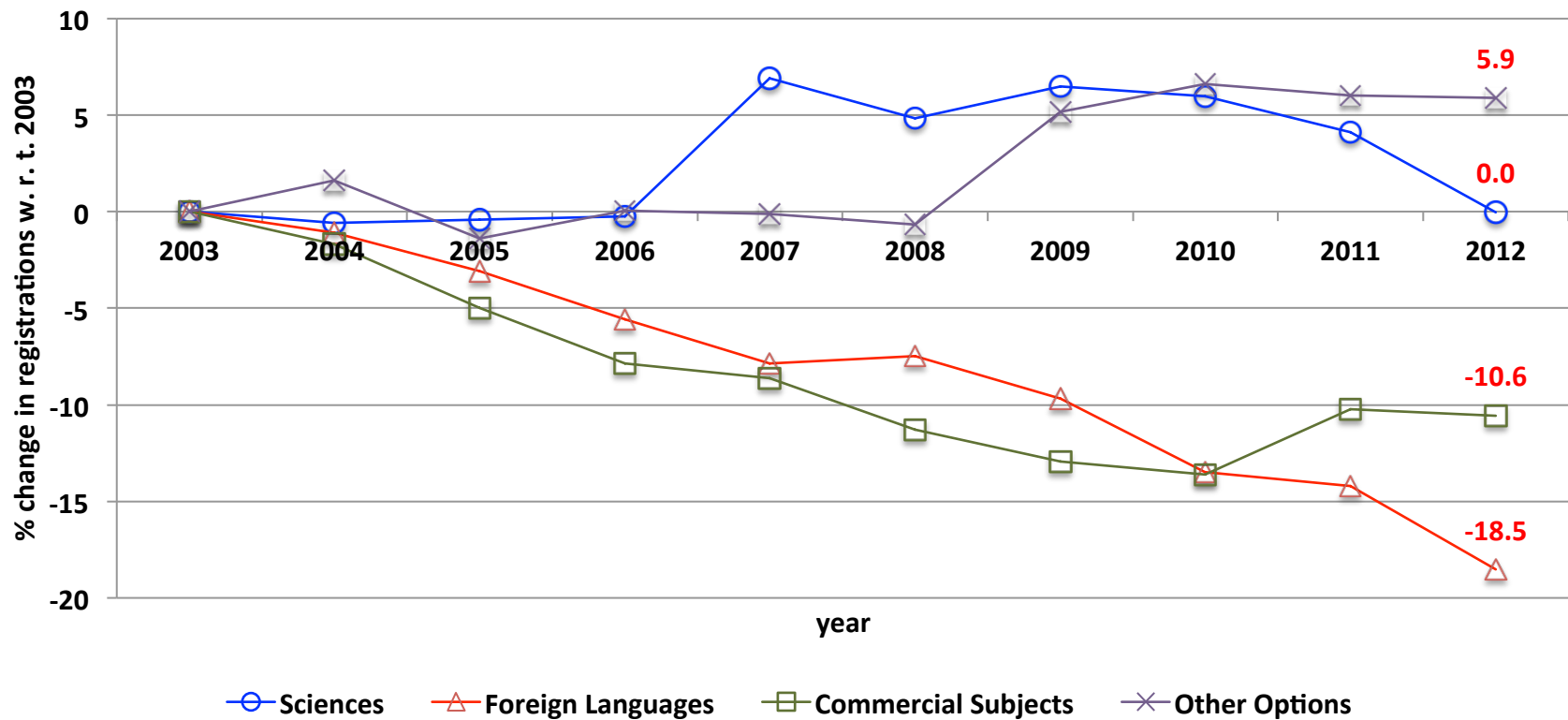


Females



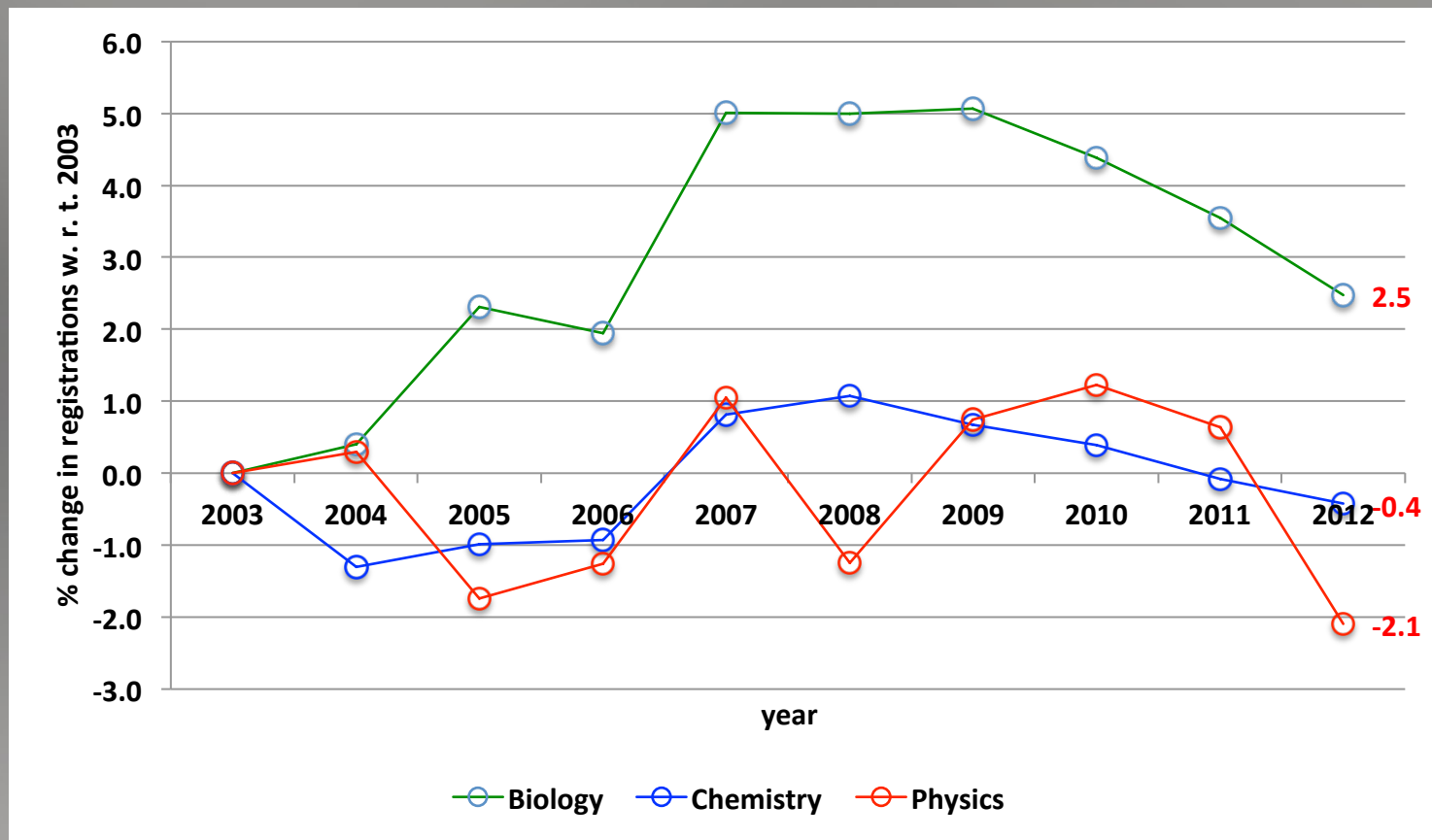
Percentage changes in registrations with respect to 2003: Groups of subjects

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Sciences	0.0	-0.6	-0.4	-0.2	6.9	4.8	6.5	6.0	4.1	0.0
Foreign Languages	0.0	-1.1	-3.1	-5.6	-7.9	-7.5	-9.7	-13.5	-14.2	-18.5
Commercial Subjects	0.0	-1.7	-5.0	-7.9	-8.6	-11.3	-12.9	-13.6	-10.2	-10.6
Other Options	0.0	1.6	-1.4	0.1	-0.1	-0.7	5.2	6.6	6.0	5.9



Percentage changes in registrations with respect to 2003: Biology, Chemistry & Physics

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Biology	0.0	0.4	2.3	1.9	5.0	5.0	5.1	4.4	3.5	2.5
Chemistry	0.0	-1.3	-1.0	-0.9	0.8	1.1	0.7	0.4	-0.1	-0.4
Physics	0.0	0.3	-1.7	-1.3	1.1	-1.2	0.7	1.2	0.6	-2.1



Classification of exam registrations

- ✓ **State schools:**
 - **Junior Lyceums (JL)** – males & females
 - **Area Secondary Schools (AS)** – males & females
 - **Gozo schools (GS)** – males & females

- ✓ **Church schools (CS)** – males & females

- ✓ **Independent schools (IS)** – co-educational

- ✓ **Post Secondary schools (PSS)** – co-educational

- ✓ **Private candidates (PC)** – males & females

English Language & Mathematics: Number of registrations

	Year	JL (M)	AS (M)	CS (M)	IS (M)	PSS (M)	GS (M)	PC (M)	Total (M)	JL (F)	AS (F)	CS (F)	IS (F)	PSS (F)	GS (F)	PC (F)	Total (F)
English Lang.	2003	518	362	719	188	100	170	555	2612	906	418	653	400	175	185	574	3311
Mathematics	2003	530	331	727	189	160	170	439	2546	925	357	651	100	304	193	415	2945
English Lang.	2004	578	326	736	194	106	167	639	2746	896	430	672	138	165	242	652	3195
Mathematics	2004	562	309	730	193	89	162	429	2474	880	360	670	136	201	229	421	2897
English Lang.	2005	630	342	724	220	134	172	671	2893	933	437	709	122	226	221	688	3336
Mathematics	2005	620	289	721	219	136	168	429	2582	942	366	707	121	296	216	397	3045
English Lang.	2006	702	364	721	228	154	155	539	2863	953	356	677	149	221	205	578	3139
Mathematics	2006	695	289	724	227	174	148	352	2609	955	284	672	147	273	210	409	2950
English Lang.	2007	661	312	733	238	132	168	552	2796	973	376	703	183	183	185	607	3210
Mathematics	2007	659	284	739	234	145	165	414	2640	974	333	693	182	254	188	451	3075
English Lang.	2008	727	307	728	241	112	174	512	2801	923	355	688	152	216	189	609	3132
Mathematics	2008	724	284	725	240	167	174	400	2714	935	306	679	149	351	188	450	3058
English Lang.	2009	625	335	712	256	89	185	490	2692	876	354	665	149	198	193	547	2982
Mathematics	2009	627	295	707	254	129	187	385	2584	881	305	666	150	274	189	376	2841
English Lang.	2010	609	456	722	245	101	187	471	2791	894	339	675	135	176	179	503	2901
Mathematics	2010	601	413	724	243	135	184	316	2616	911	292	667	133	335	180	364	2882
English Lang.	2011	548	438	733	223	44	161	421	2568	839	323	678	157	117	171	518	2803
Mathematics	2011	564	397	738	220	87	162	322	2490	836	263	671	157	242	172	333	2674
English Lang.	2012	484	463	736	227	31	183	466	2590	804	291	643	188	68	203	539	2736
Mathematics	2012	481	438	727	226	97	178	397	2544	813	228	636	188	193	198	559	2815

	Year	JL (Tot)	AS (Tot)	CS (Tot)	IS (Tot)	PSS (Tot)	GS (Tot)	PC (Tot)	Total
English Lang.	2003	1424	780	1372	588	275	355	1129	5923
Mathematics	2003	1455	688	1378	289	464	363	854	5491
English Lang.	2004	1474	756	1408	332	271	409	1291	5941
Mathematics	2004	1442	669	1400	329	290	391	850	5371
English Lang.	2005	1563	779	1433	342	360	393	1359	6229
Mathematics	2005	1562	655	1428	340	432	384	826	5627
English Lang.	2006	1655	720	1398	377	375	360	1117	6002
Mathematics	2006	1650	573	1396	374	447	358	761	5559
English Lang.	2007	1634	688	1436	421	315	353	1159	6006
Mathematics	2007	1633	617	1432	416	399	353	865	5715
English Lang.	2008	1650	662	1416	393	328	363	1121	5933
Mathematics	2008	1659	590	1404	389	518	362	850	5772
English Lang.	2009	1501	689	1377	405	287	378	1037	5674
Mathematics	2009	1508	600	1373	404	403	376	761	5425
English Lang.	2010	1503	795	1397	380	277	366	974	5692
Mathematics	2010	1512	705	1391	376	470	364	680	5498
English Lang.	2011	1387	761	1411	380	161	332	939	5371
Mathematics	2011	1400	660	1409	377	329	334	655	5164
English Lang.	2012	1288	754	1379	415	99	386	1005	5326
Mathematics	2012	1294	666	1363	414	290	376	956	5359

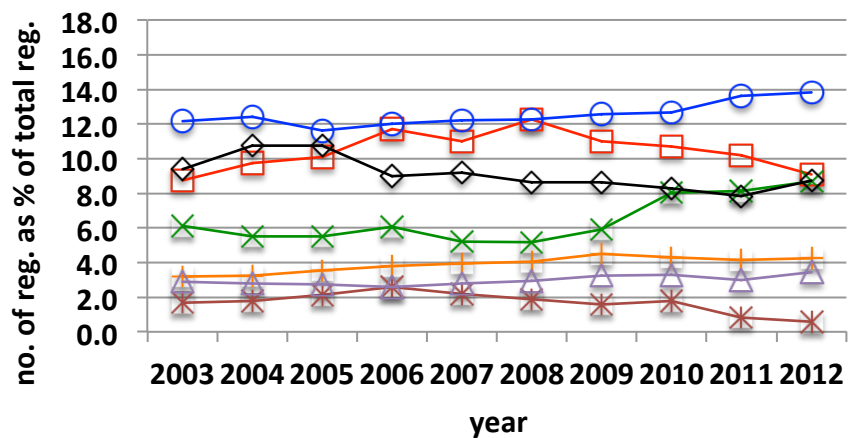
English Language: Percentage by school type and gender

	JL (M)	AS (M)	CS (M)	IS (M)	PSS (M)	GS (M)	PC (M)		JL (F)	AS (F)	CS (F)	IS (F)	PSS (F)	GS (F)	PC (F)
2003	8.7	6.1	12.1	3.2	1.7	2.9	9.4		15.3	7.1	11.0	6.8	3.0	3.1	9.7
2004	9.7	5.5	12.4	3.3	1.8	2.8	10.8		15.1	7.2	11.3	2.3	2.8	4.1	11.0
2005	10.1	5.5	11.6	3.5	2.2	2.8	10.8		15.0	7.0	11.4	2.0	3.6	3.5	11.0
2006	11.7	6.1	12.0	3.8	2.6	2.6	9.0		15.9	5.9	11.3	2.5	3.7	3.4	9.6
2007	11.0	5.2	12.2	4.0	2.2	2.8	9.2		16.2	6.3	11.7	3.0	3.0	3.1	10.1
2008	12.3	5.2	12.3	4.1	1.9	2.9	8.6		15.6	6.0	11.6	2.6	3.6	3.2	10.3
2009	11.0	5.9	12.5	4.5	1.6	3.3	8.6		15.4	6.2	11.7	2.6	3.5	3.4	9.6
2010	10.7	8.0	12.7	4.3	1.8	3.3	8.3		15.7	6.0	11.9	2.4	3.1	3.1	8.8
2011	10.2	8.2	13.6	4.2	0.8	3.0	7.8		15.6	6.0	12.6	2.9	2.2	3.2	9.6
2012	9.1	8.7	13.8	4.3	0.6	3.4	8.7		15.1	5.5	12.1	3.5	1.3	3.8	10.1

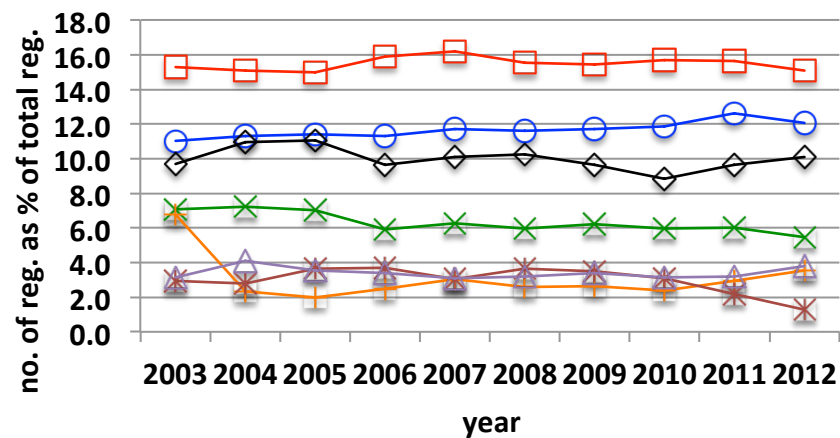
	JL (Tot)	AS (Tot)	CS (Tot)	IS (Tot)	PSS (Tot)	GS (Tot)	PC (Tot)
2003	24.0	13.2	23.2	9.9	4.6	6.0	19.1
2004	24.8	12.7	23.7	5.6	4.6	6.9	21.7
2005	25.1	12.5	23.0	5.5	5.8	6.3	21.8
2006	27.6	12.0	23.3	6.3	6.2	6.0	18.6
2007	27.2	11.5	23.9	7.0	5.2	5.9	19.3
2008	27.8	11.2	23.9	6.6	5.5	6.1	18.9
2009	26.5	12.1	24.3	7.1	5.1	6.7	18.3
2010	26.4	14.0	24.5	6.7	4.9	6.4	17.1
2011	25.8	14.2	26.3	7.1	3.0	6.2	17.5
2012	24.2	14.2	25.9	7.8	1.9	7.2	18.9

English Language: Percentage by school type and gender

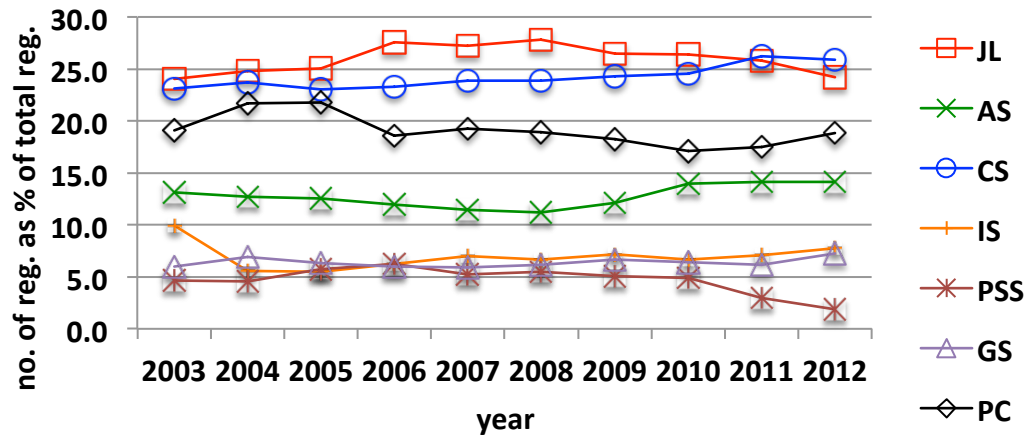
Males



Females



Total M & F



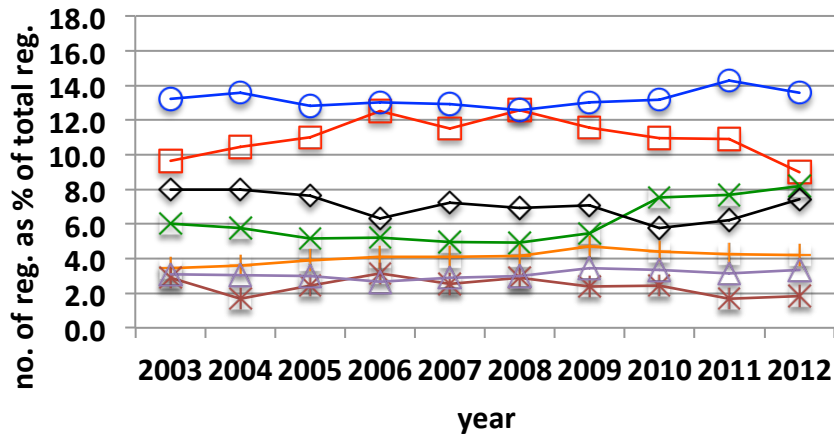
Mathematics: Percentage by school type and gender

	JL (M)	AS (M)	CS (M)	IS (M)	PSS (M)	GS (M)	PC (M)		JL (F)	AS (F)	CS (F)	IS (F)	PSS (F)	GS (F)	PC (F)
2003	9.7	6.0	13.2	3.4	2.9	3.1	8.0		16.8	6.5	11.9	1.8	5.5	3.5	7.6
2004	10.5	5.8	13.6	3.6	1.7	3.0	8.0		16.4	6.7	12.5	2.5	3.7	4.3	7.8
2005	11.0	5.1	12.8	3.9	2.4	3.0	7.6		16.7	6.5	12.6	2.2	5.3	3.8	7.1
2006	12.5	5.2	13.0	4.1	3.1	2.7	6.3		17.2	5.1	12.1	2.6	4.9	3.8	7.4
2007	11.5	5.0	12.9	4.1	2.5	2.9	7.2		17.0	5.8	12.1	3.2	4.4	3.3	7.9
2008	12.5	4.9	12.6	4.2	2.9	3.0	6.9		16.2	5.3	11.8	2.6	6.1	3.3	7.8
2009	11.6	5.4	13.0	4.7	2.4	3.4	7.1		16.2	5.6	12.3	2.8	5.1	3.5	6.9
2010	10.9	7.5	13.2	4.4	2.5	3.3	5.7		16.6	5.3	12.1	2.4	6.1	3.3	6.6
2011	10.9	7.7	14.3	4.3	1.7	3.1	6.2		16.2	5.1	13.0	3.0	4.7	3.3	6.4
2012	9.0	8.2	13.6	4.2	1.8	3.3	7.4		15.2	4.3	11.9	3.5	3.6	3.7	10.4

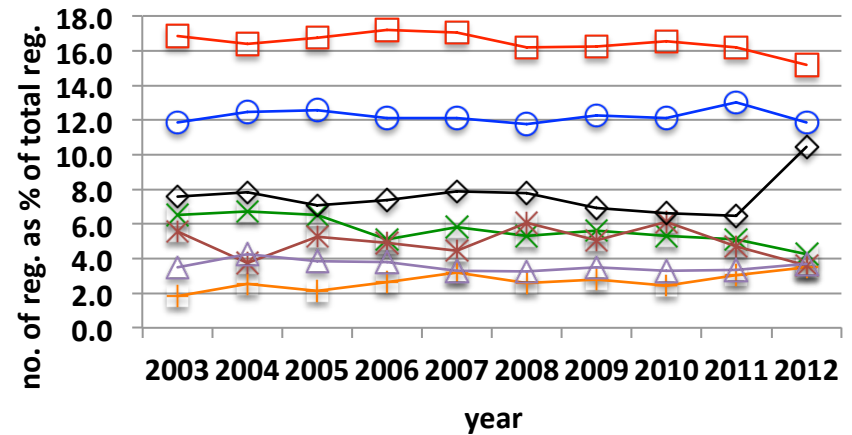
	JL (Tot)	AS (Tot)	CS (Tot)	IS (Tot)	PSS (Tot)	GS (Tot)	PC (Tot)
2003	26.5	12.5	25.1	5.3	8.5	6.6	15.6
2004	26.8	12.5	26.1	6.1	5.4	7.3	15.8
2005	27.8	11.6	25.4	6.0	7.7	6.8	14.7
2006	29.7	10.3	25.1	6.7	8.0	6.4	13.7
2007	28.6	10.8	25.1	7.3	7.0	6.2	15.1
2008	28.7	10.2	24.3	6.7	9.0	6.3	14.7
2009	27.8	11.1	25.3	7.4	7.4	6.9	14.0
2010	27.5	12.8	25.3	6.8	8.5	6.6	12.4
2011	27.1	12.8	27.3	7.3	6.4	6.5	12.7
2012	24.1	12.4	25.4	7.7	5.4	7.0	17.8

Mathematics: Percentage by school type and gender

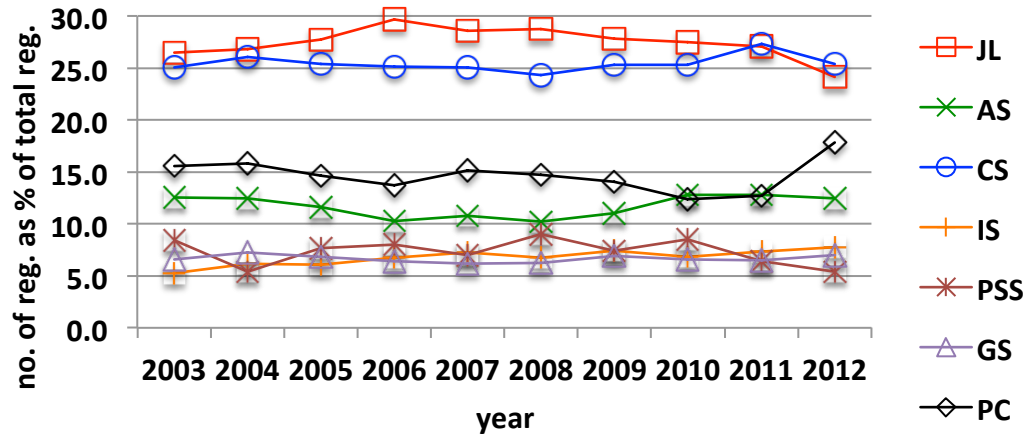
Males



Females



Total M & F



Biology, Chemistry & Physics: Number of registrations – males & females

		JL (M)	AS (M)	CS (M)	IS (M)	PSS (M)	GS (M)	PC (M)	Total (M)		JL (F)	AS (F)	CS (F)	IS (F)	PSS (F)	GS (F)	PC (F)	Total (F)
Biology	2003	81	2	191	73	16	33	25	421		228	55	408	61	77	79	42	950
Chemistry	2003	107	4	237	43	12	32	18	453		133	0	212	28	17	52	16	458
Physics	2003	518	223	721	150	125	157	217	2111		917	233	453	66	212	176	157	2214
Biology	2004	60	3	210	59	21	49	20	422		189	41	447	95	88	73	65	998
Chemistry	2004	51	4	216	45	1	38	10	365		99	0	232	43	13	47	21	455
Physics	2004	564	203	719	159	92	151	231	2119		897	287	458	87	176	215	163	2283
Biology	2005	92	4	224	110	18	45	21	514		253	35	469	85	118	70	61	1091
Chemistry	2005	69	1	242	69	7	31	12	431		132	1	208	38	10	32	12	433
Physics	2005	602	195	706	179	72	156	181	2091		938	275	451	85	168	187	143	2247
Biology	2006	83	0	221	91	32	38	24	489		275	25	431	101	104	69	71	1076
Chemistry	2006	76	3	242	71	5	22	12	431		128	4	211	44	9	27	9	432
Physics	2006	672	213	713	196	106	134	159	2193		940	213	449	85	142	180	145	2154
Biology	2007	135	4	209	108	24	55	23	558		331	41	442	141	128	95	64	1242
Chemistry	2007	93	3	221	77	14	31	11	450		160	2	233	72	16	51	13	547
Physics	2007	635	216	702	203	104	141	196	2197		963	240	496	115	144	164	189	2311
Biology	2008	136	1	255	101	25	39	23	580		326	41	462	118	109	91	58	1205
Chemistry	2008	86	6	268	76	7	31	8	482		171	4	213	59	18	43	19	527
Physics	2008	692	181	694	214	92	152	175	2200		943	246	431	96	119	166	90	2091
Biology	2009	89	2	234	115	23	43	16	522		321	39	430	120	109	86	50	1155
Chemistry	2009	60	3	246	92	7	39	11	458		129	0	206	57	10	42	13	457
Physics	2009	621	210	687	215	84	174	154	2145		884	225	440	88	117	170	96	2020
Biology	2010	96	11	190	77	41	39	19	473		392	32	397	105	129	72	51	1178
Chemistry	2010	48	7	224	60	12	35	12	398		187	1	204	45	25	36	12	510
Physics	2010	584	322	699	220	88	159	141	2213		905	197	477	78	150	156	89	2052
Biology	2011	99	7	177	93	27	35	20	458		298	26	375	108	115	81	61	1064
Chemistry	2011	41	10	188	63	5	36	18	361		153	1	172	65	19	46	19	475
Physics	2011	531	311	709	180	57	151	141	2080		833	184	468	109	113	145	112	1964
Biology	2012	64	34	195	91	19	34	34	471		244	26	363	123	80	75	87	998
Chemistry	2012	27	23	191	68	9	33	15	366		123	3	198	72	16	31	16	459
Physics	2012	449	329	697	196	52	156	146	2025		803	155	439	134	64	173	118	1886

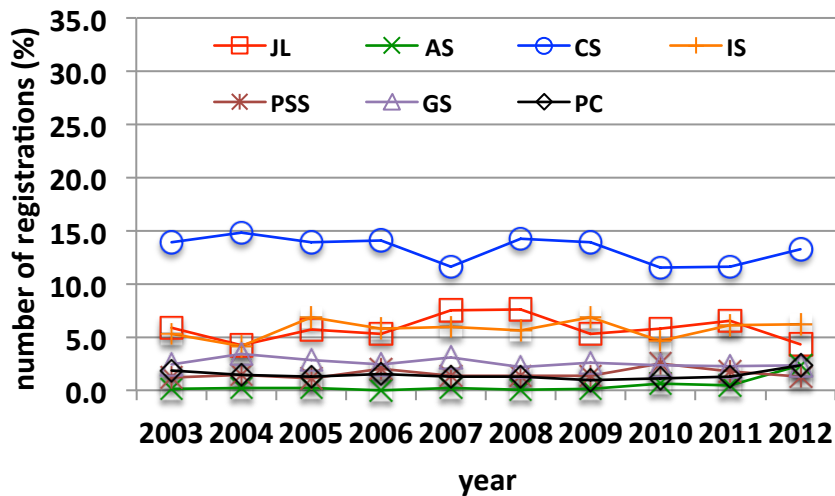
Biology, Chemistry & Physics: Total number of registrations

		JL (Tot)	AS (Tot)	CS (Tot)	IS (Tot)	PSS (Tot)	GS (Tot)	PC (Tot)	Total
Biology	2003	309	57	599	134	93	112	67	1371
Chemistry	2003	240	4	449	71	29	84	34	911
Physics	2003	1435	456	1174	216	337	333	374	4325
Biology	2004	249	44	657	154	109	122	85	1420
Chemistry	2004	150	4	448	88	14	85	31	820
Physics	2004	1461	490	1177	246	268	366	394	4402
Biology	2005	345	39	693	195	136	115	82	1605
Chemistry	2005	201	2	450	107	17	63	24	864
Physics	2005	1540	470	1157	264	240	343	324	4338
Biology	2006	358	25	652	192	136	107	95	1565
Chemistry	2006	204	7	453	115	14	49	21	863
Physics	2006	1612	426	1162	281	248	314	304	4347
Biology	2007	466	45	651	249	152	150	87	1800
Chemistry	2007	253	5	454	149	30	82	24	997
Physics	2007	1598	456	1198	318	248	305	385	4508
Biology	2008	462	42	717	219	134	130	81	1785
Chemistry	2008	257	10	481	135	25	74	27	1009
Physics	2008	1635	427	1125	310	211	318	265	4291
Biology	2009	410	41	664	235	132	129	66	1677
Chemistry	2009	189	3	452	149	17	81	24	915
Physics	2009	1505	435	1127	303	201	344	250	4165
Biology	2010	488	43	587	182	170	111	70	1651
Chemistry	2010	235	8	428	105	37	71	24	908
Physics	2010	1489	519	1176	298	238	315	230	4265
Biology	2011	397	33	552	201	142	116	81	1522
Chemistry	2011	194	11	360	128	24	82	37	836
Physics	2011	1364	495	1177	289	170	296	253	4044
Biology	2012	308	60	558	214	99	109	121	1469
Chemistry	2012	150	26	389	140	25	64	31	825
Physics	2012	1252	484	1136	330	116	329	264	3911

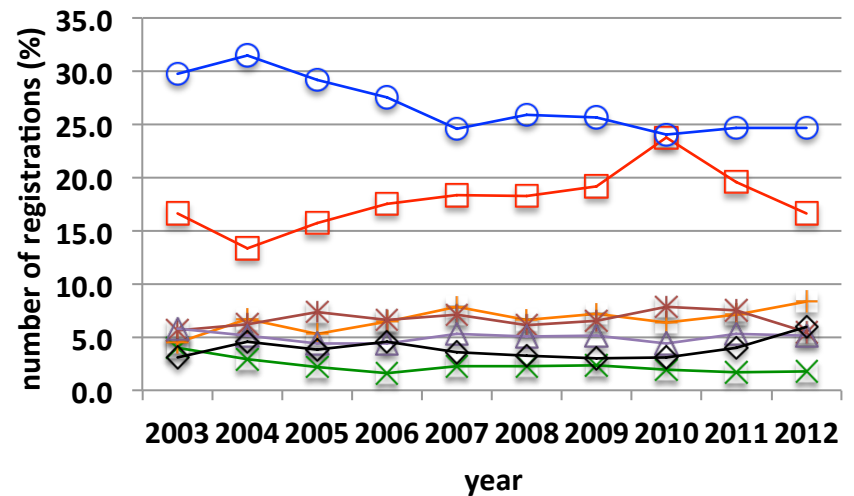
Biology: percentage of registrations by school type & gender

	JL (M)	AS (M)	CS (M)	IS (M)	PSS (M)	GS (M)	PC (M)		JL (F)	AS (F)	CS (F)	IS (F)	PSS (F)	GS (F)	PC (F)
2003	5.9	0.1	13.9	5.3	1.2	2.4	1.8		16.6	4.0	29.8	4.4	5.6	5.8	3.1
2004	4.2	0.2	14.8	4.2	1.5	3.5	1.4		13.3	2.9	31.5	6.7	6.2	5.1	4.6
2005	5.7	0.2	14.0	6.9	1.1	2.8	1.3		15.8	2.2	29.2	5.3	7.4	4.4	3.8
2006	5.3	0.0	14.1	5.8	2.0	2.4	1.5		17.6	1.6	27.5	6.5	6.6	4.4	4.5
2007	7.5	0.2	11.6	6.0	1.3	3.1	1.3		18.4	2.3	24.6	7.8	7.1	5.3	3.6
2008	7.6	0.1	14.3	5.7	1.4	2.2	1.3		18.3	2.3	25.9	6.6	6.1	5.1	3.2
2009	5.3	0.1	14.0	6.9	1.4	2.6	1.0		19.1	2.3	25.6	7.2	6.5	5.1	3.0
2010	5.8	0.7	11.5	4.7	2.5	2.4	1.2		23.7	1.9	24.0	6.4	7.8	4.4	3.1
2011	6.5	0.5	11.6	6.1	1.8	2.3	1.3		19.6	1.7	24.6	7.1	7.6	5.3	4.0
2012	4.4	2.3	13.3	6.2	1.3	2.3	2.3		16.6	1.8	24.7	8.4	5.4	5.1	5.9
Dif. wrt 2003	-1.6	2.2	-0.7	0.9	0.1	-0.1	0.5		0.0	-2.2	-5.0	3.9	-0.2	-0.7	2.9

Males

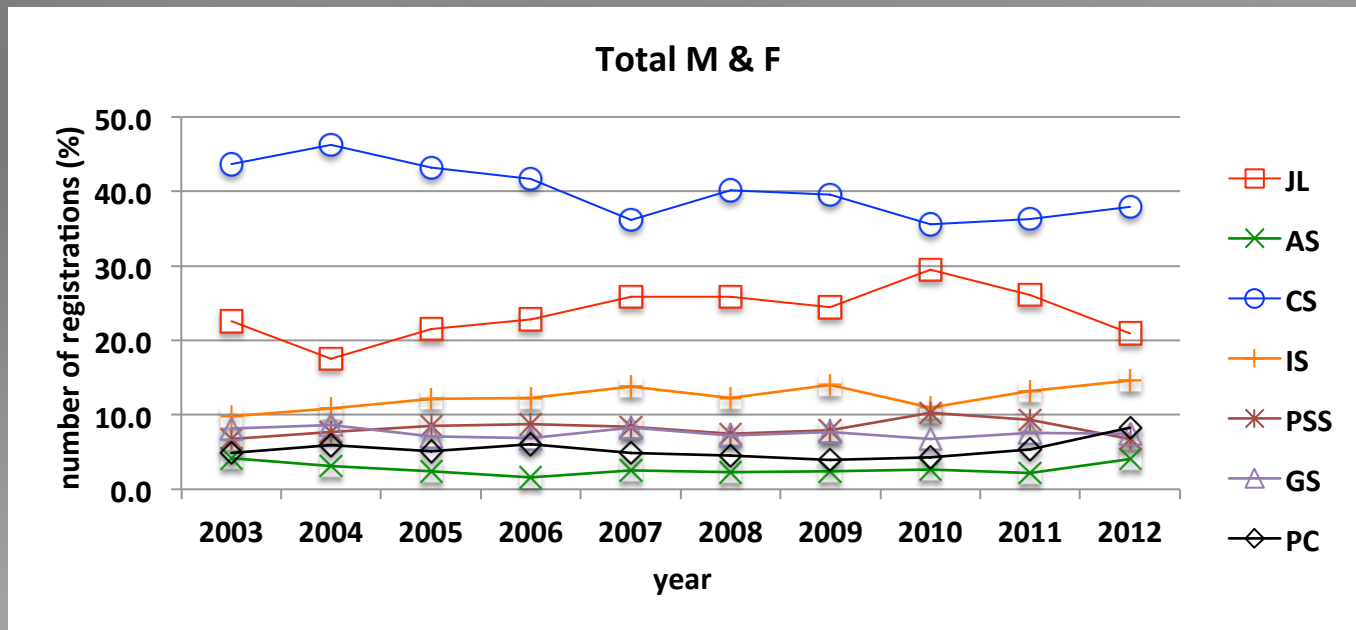


Females



Biology: percentage of registrations by school type

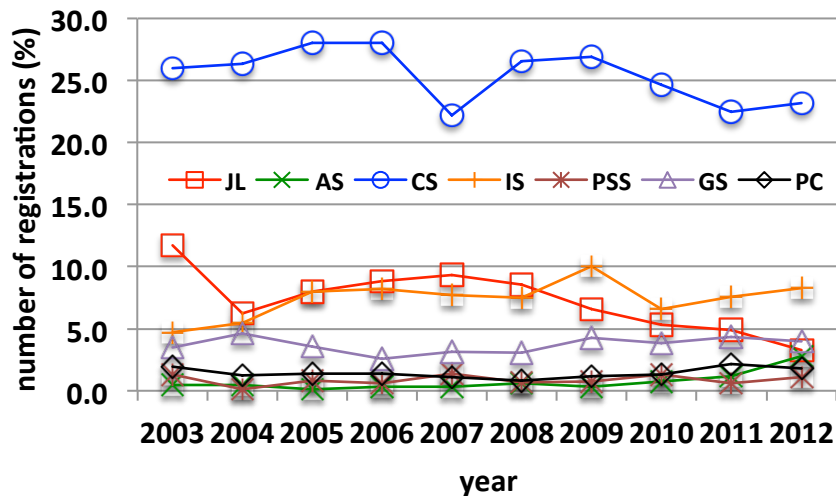
	JL	AS	CS	IS	PSS	GS	PC
2003	22.5	4.2	43.7	9.8	6.8	8.2	4.9
2004	17.5	3.1	46.3	10.8	7.7	8.6	6.0
2005	21.5	2.4	43.2	12.1	8.5	7.2	5.1
2006	22.9	1.6	41.7	12.3	8.7	6.8	6.1
2007	25.9	2.5	36.2	13.8	8.4	8.3	4.8
2008	25.9	2.4	40.2	12.3	7.5	7.3	4.5
2009	24.4	2.4	39.6	14.0	7.9	7.7	3.9
2010	29.6	2.6	35.6	11.0	10.3	6.7	4.2
2011	26.1	2.2	36.3	13.2	9.3	7.6	5.3
2012	21.0	4.1	38.0	14.6	6.7	7.4	8.2
Dif. wrt 2003	-1.6	-0.1	-5.7	4.8	0.0	-0.7	3.3



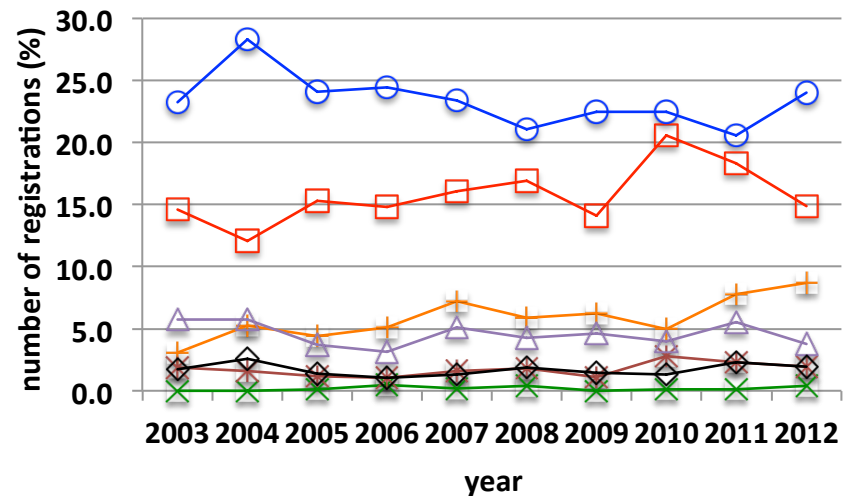
Chemistry: percentage of registrations by school type & gender

	JL (M)	AS (M)	CS (M)	IS (M)	PSS (M)	GS (M)	PC (M)		JL (F)	AS (F)	CS (F)	IS (F)	PSS (F)	GS (F)	PC (F)
2003	11.7	0.4	26.0	4.7	1.3	3.5	2.0		14.6	0.0	23.3	3.1	1.9	5.7	1.8
2004	6.2	0.5	26.3	5.5	0.1	4.6	1.2		12.1	0.0	28.3	5.2	1.6	5.7	2.6
2005	8.0	0.1	28.0	8.0	0.8	3.6	1.4		15.3	0.1	24.1	4.4	1.2	3.7	1.4
2006	8.8	0.3	28.0	8.2	0.6	2.5	1.4		14.8	0.5	24.4	5.1	1.0	3.1	1.0
2007	9.3	0.3	22.2	7.7	1.4	3.1	1.1		16.0	0.2	23.4	7.2	1.6	5.1	1.3
2008	8.5	0.6	26.6	7.5	0.7	3.1	0.8		16.9	0.4	21.1	5.8	1.8	4.3	1.9
2009	6.6	0.3	26.9	10.1	0.8	4.3	1.2		14.1	0.0	22.5	6.2	1.1	4.6	1.4
2010	5.3	0.8	24.7	6.6	1.3	3.9	1.3		20.6	0.1	22.5	5.0	2.8	4.0	1.3
2011	4.9	1.2	22.5	7.5	0.6	4.3	2.2		18.3	0.1	20.6	7.8	2.3	5.5	2.3
2012	3.3	2.8	23.2	8.2	1.1	4.0	1.8		14.9	0.4	24.0	8.7	1.9	3.8	1.9
Dif. wrt 2003	-8.5	2.3	-2.9	3.5	-0.2	0.5	-0.2		0.3	0.4	0.7	5.7	0.1	-2.0	0.2

Males

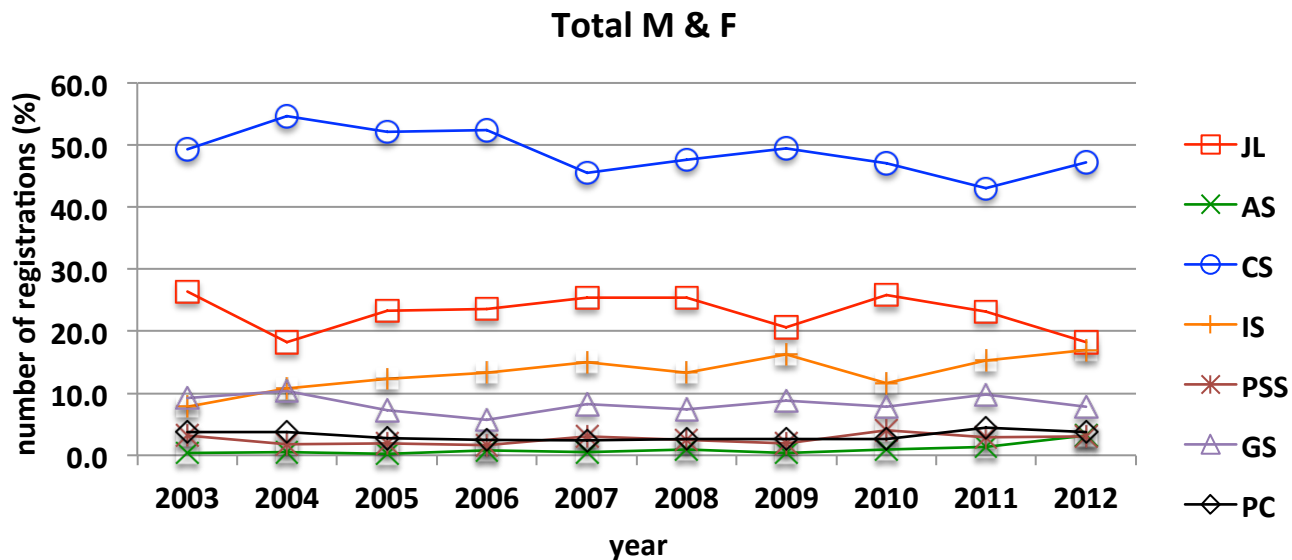


Females



Chemistry: percentage of registrations by school type

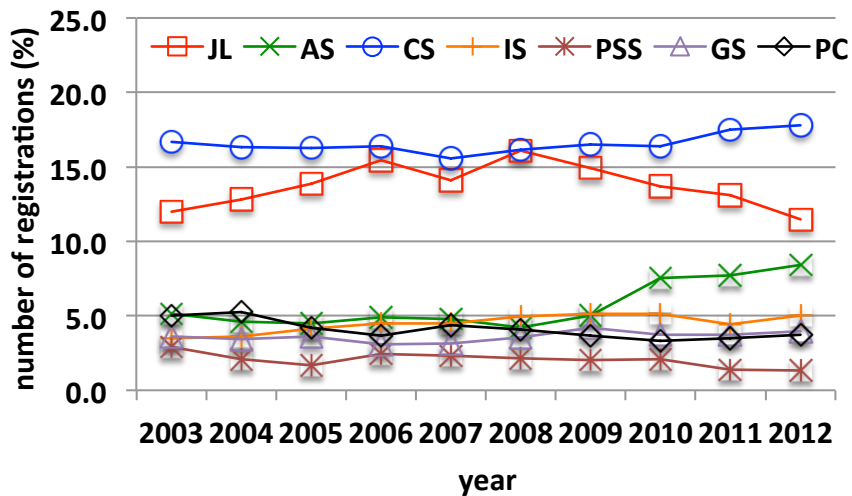
	JL	AS	CS	IS	PSS	GS	PC
2003	26.3	0.4	49.3	7.8	3.2	9.2	3.7
2004	18.3	0.5	54.6	10.7	1.7	10.4	3.8
2005	23.3	0.2	52.1	12.4	2.0	7.3	2.8
2006	23.6	0.8	52.5	13.3	1.6	5.7	2.4
2007	25.4	0.5	45.5	14.9	3.0	8.2	2.4
2008	25.5	1.0	47.7	13.4	2.5	7.3	2.7
2009	20.7	0.3	49.4	16.3	1.9	8.9	2.6
2010	25.9	0.9	47.1	11.6	4.1	7.8	2.6
2011	23.2	1.3	43.1	15.3	2.9	9.8	4.4
2012	18.2	3.2	47.2	17.0	3.0	7.8	3.8
Dif. wrt 2003	-8.2	2.7	-2.1	9.2	-0.2	-1.5	0.0



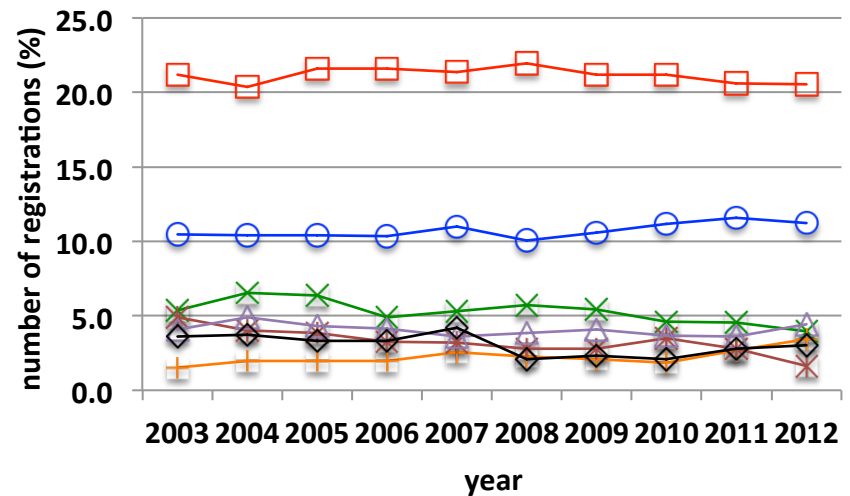
Physics: percentage of registrations by school type & gender

	JL (M)	AS (M)	CS (M)	IS (M)	PSS (M)	GS (M)	PC (M)		JL (F)	AS (F)	CS (F)	IS (F)	PSS (F)	GS (F)	PC (F)
2003	12.0	5.2	16.7	3.5	2.9	3.6	5.0		21.2	5.4	10.5	1.5	4.9	4.1	3.6
2004	12.8	4.6	16.3	3.6	2.1	3.4	5.2		20.4	6.5	10.4	2.0	4.0	4.9	3.7
2005	13.9	4.5	16.3	4.1	1.7	3.6	4.2		21.6	6.3	10.4	2.0	3.9	4.3	3.3
2006	15.5	4.9	16.4	4.5	2.4	3.1	3.7		21.6	4.9	10.3	2.0	3.3	4.1	3.3
2007	14.1	4.8	15.6	4.5	2.3	3.1	4.3		21.4	5.3	11.0	2.6	3.2	3.6	4.2
2008	16.1	4.2	16.2	5.0	2.1	3.5	4.1		22.0	5.7	10.0	2.2	2.8	3.9	2.1
2009	14.9	5.0	16.5	5.2	2.0	4.2	3.7		21.2	5.4	10.6	2.1	2.8	4.1	2.3
2010	13.7	7.5	16.4	5.2	2.1	3.7	3.3		21.2	4.6	11.2	1.8	3.5	3.7	2.1
2011	13.1	7.7	17.5	4.5	1.4	3.7	3.5		20.6	4.5	11.6	2.7	2.8	3.6	2.8
2012	11.5	8.4	17.8	5.0	1.3	4.0	3.7		20.5	4.0	11.2	3.4	1.6	4.4	3.0
Dif. wrt 2003	-0.5	3.3	1.2	1.5	-1.6	0.4	-1.3		-0.7	-1.4	0.8	1.9	-3.3	0.4	-0.6

Males

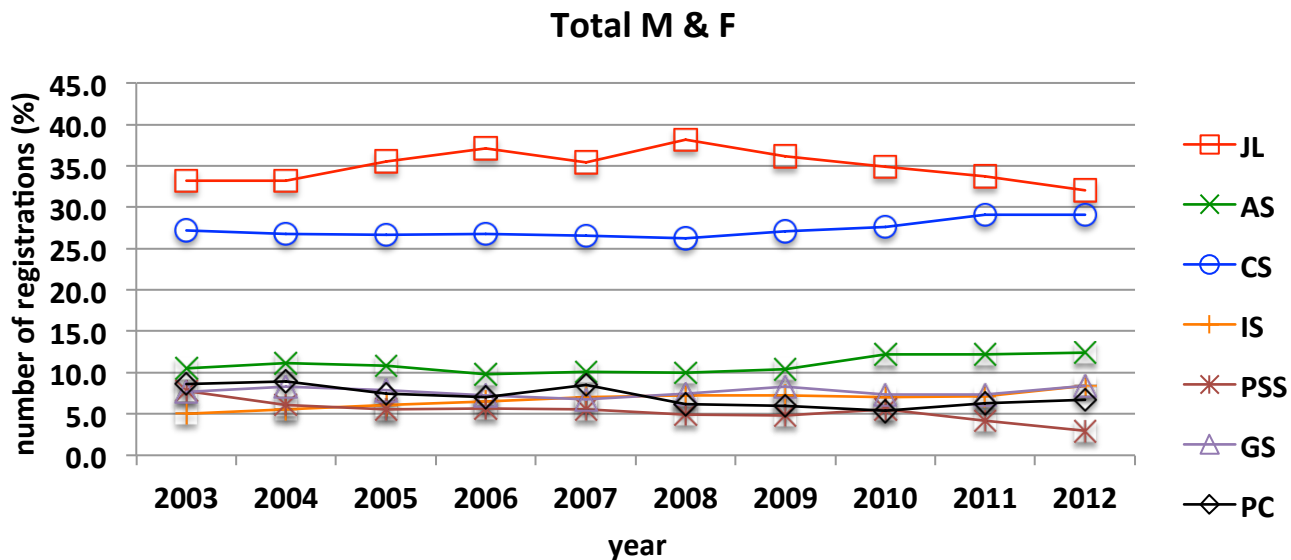


Females



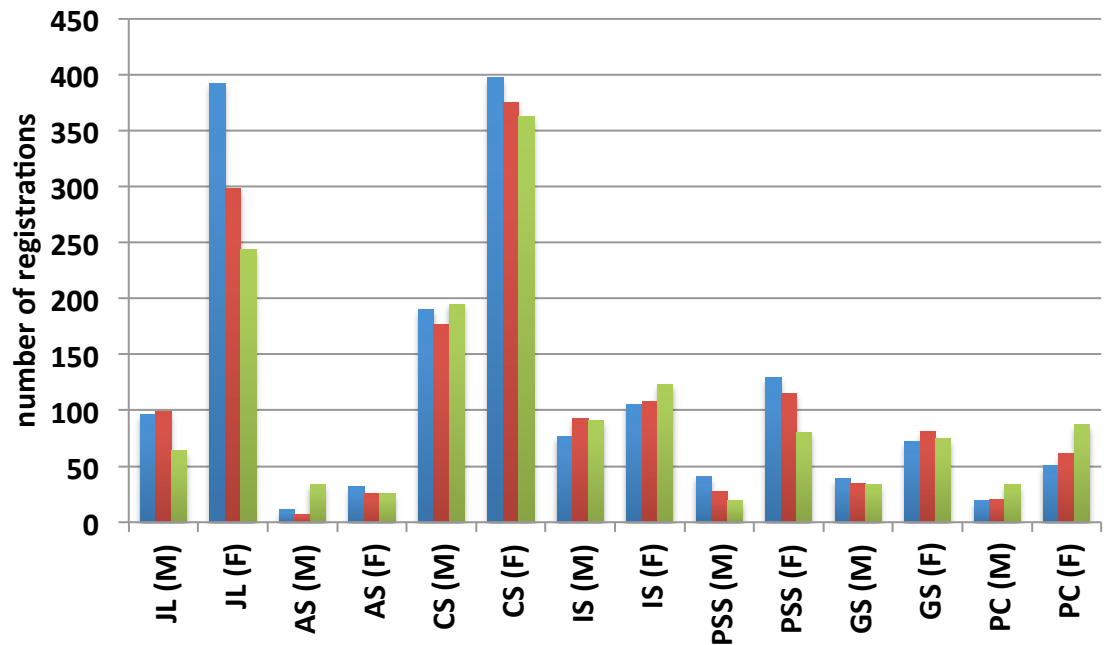
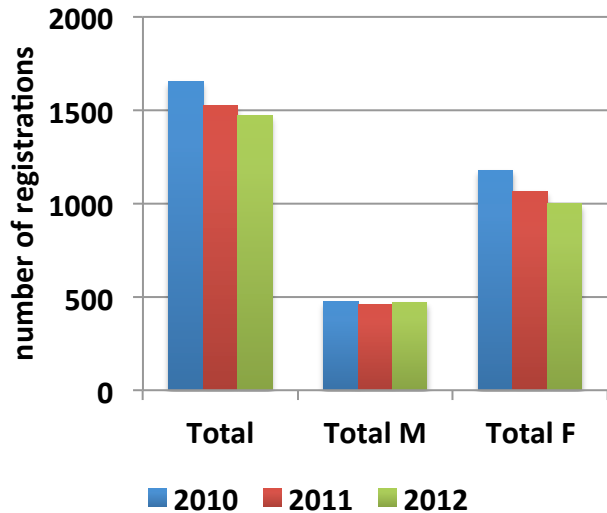
Physics: percentage of registrations by school type

	JL	AS	CS	IS	PSS	GS	PC
2003	33.2	10.5	27.1	5.0	7.8	7.7	8.6
2004	33.2	11.1	26.7	5.6	6.1	8.3	9.0
2005	35.5	10.8	26.7	6.1	5.5	7.9	7.5
2006	37.1	9.8	26.7	6.5	5.7	7.2	7.0
2007	35.4	10.1	26.6	7.1	5.5	6.8	8.5
2008	38.1	10.0	26.2	7.2	4.9	7.4	6.2
2009	36.1	10.4	27.1	7.3	4.8	8.3	6.0
2010	34.9	12.2	27.6	7.0	5.6	7.4	5.4
2011	33.7	12.2	29.1	7.1	4.2	7.3	6.3
2012	32.0	12.4	29.0	8.4	3.0	8.4	6.8
Dif. wrt 2003	-1.2	1.8	1.9	3.4	-4.8	0.7	-1.9



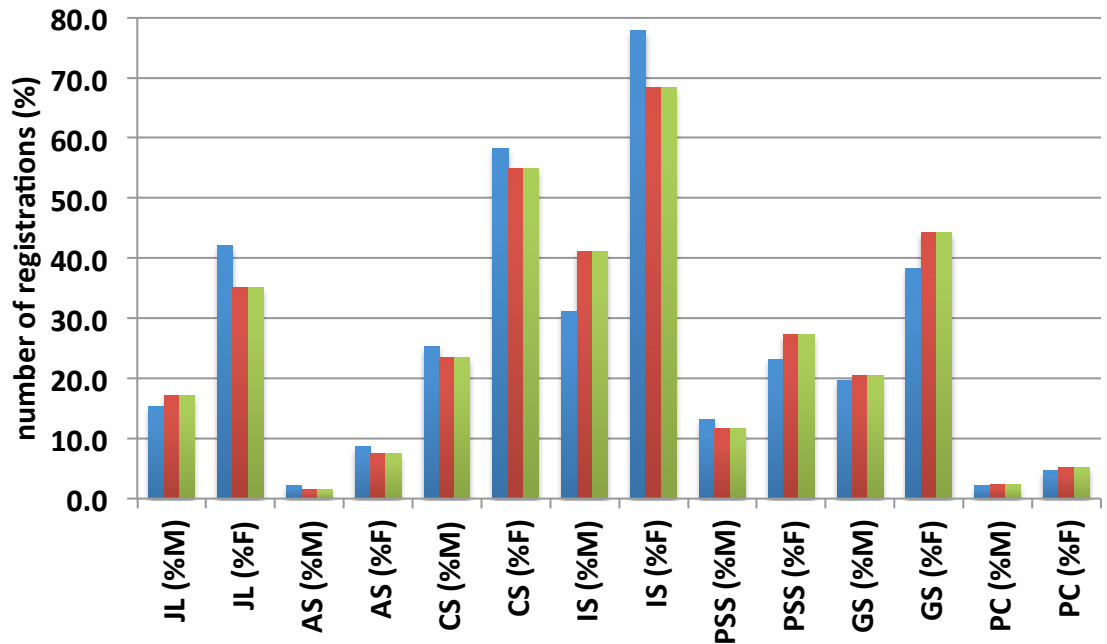
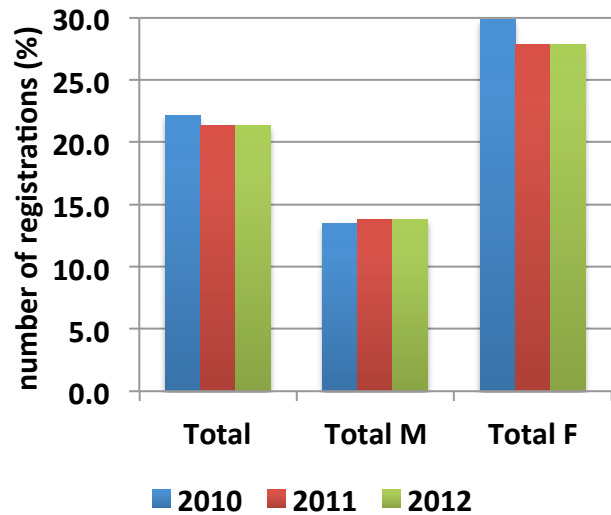
Biology – the last three years: N

	Total	Total M	Total F	JL (M)	JL (F)	AS (M)	AS (F)	CS (M)	CS (F)	IS (M)	IS (F)	PSS (M)	PSS (F)	GS (M)	GS (F)	PC (M)	PC (F)
2010	1651	473	1178	96	392	11	32	190	397	77	105	41	129	39	72	19	51
2011	1522	458	1064	99	298	7	26	177	375	93	108	27	115	35	81	20	61
2012	1469	471	998	64	244	34	26	195	363	91	123	19	80	34	75	34	87



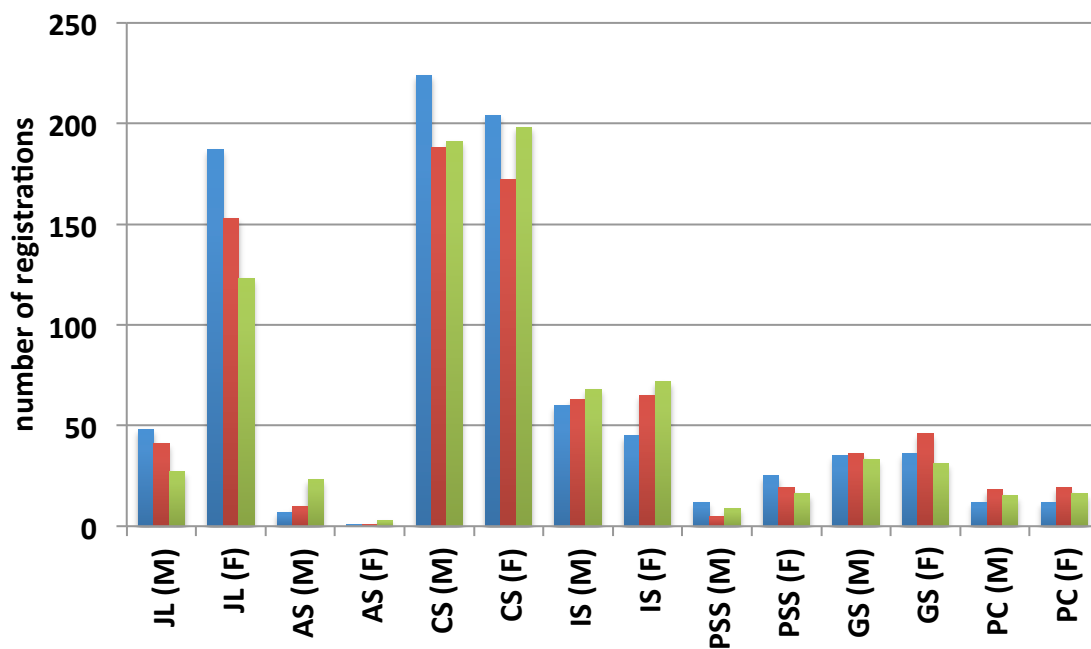
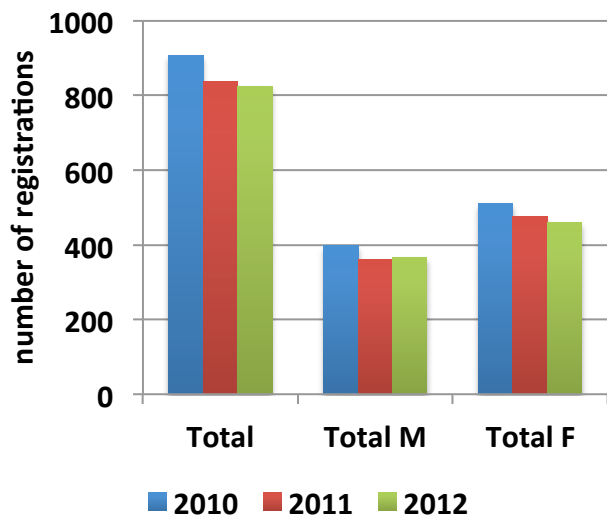
Biology – the last three years: %

	Total	Total M	Total F	JL (M)	JL (F)	AS (M)	AS (F)	CS (M)	CS (F)	IS (M)	IS (F)	PSS (M)	PSS (F)	GS (M)	GS (F)	PC (M)	PC (F)
2010	22.2	13.5	29.9	15.3	42.2	2.2	8.7	25.2	58.3	31.2	77.8	13.1	23.2	19.7	38.3	2.2	4.7
2011	21.3	13.8	27.9	17.2	35.1	1.4	7.5	23.5	54.9	41.2	68.4	11.6	27.3	20.5	44.3	2.3	5.2
2012	21.3	13.8	27.9	17.2	35.1	1.4	7.5	23.5	54.9	41.2	68.4	11.6	27.3	20.5	44.3	2.3	5.2



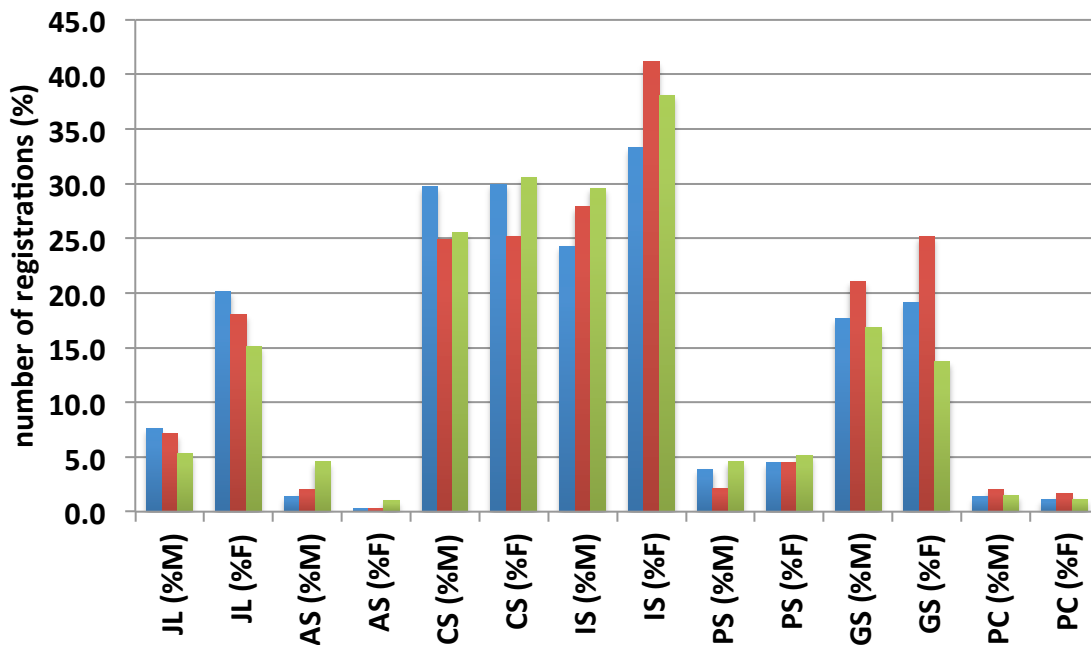
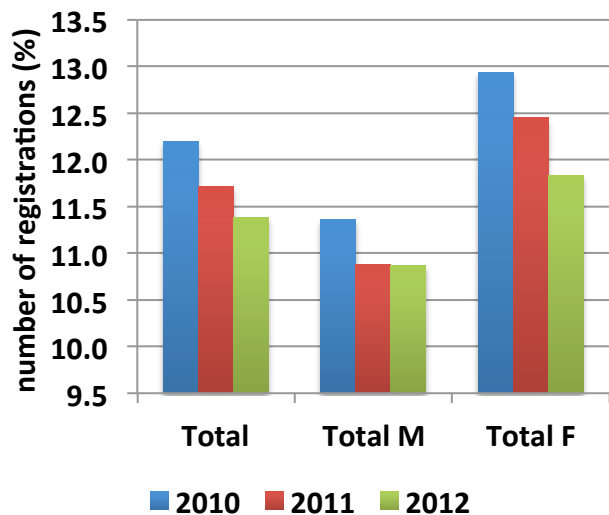
Chemistry – the last three years: N

	Total	Total M	Total F	JL (M)	JL (F)	AS (M)	AS (F)	CS (M)	CS (F)	IS (M)	IS (F)	PSS (M)	PSS (F)	GS (M)	GS (F)	PC (M)	PC (F)
2010	908	398	510	48	187	7	1	224	204	60	45	12	25	35	36	12	12
2011	836	361	475	41	153	10	1	188	172	63	65	5	19	36	46	18	19
2012	825	366	459	27	123	23	3	191	198	68	72	9	16	33	31	15	16



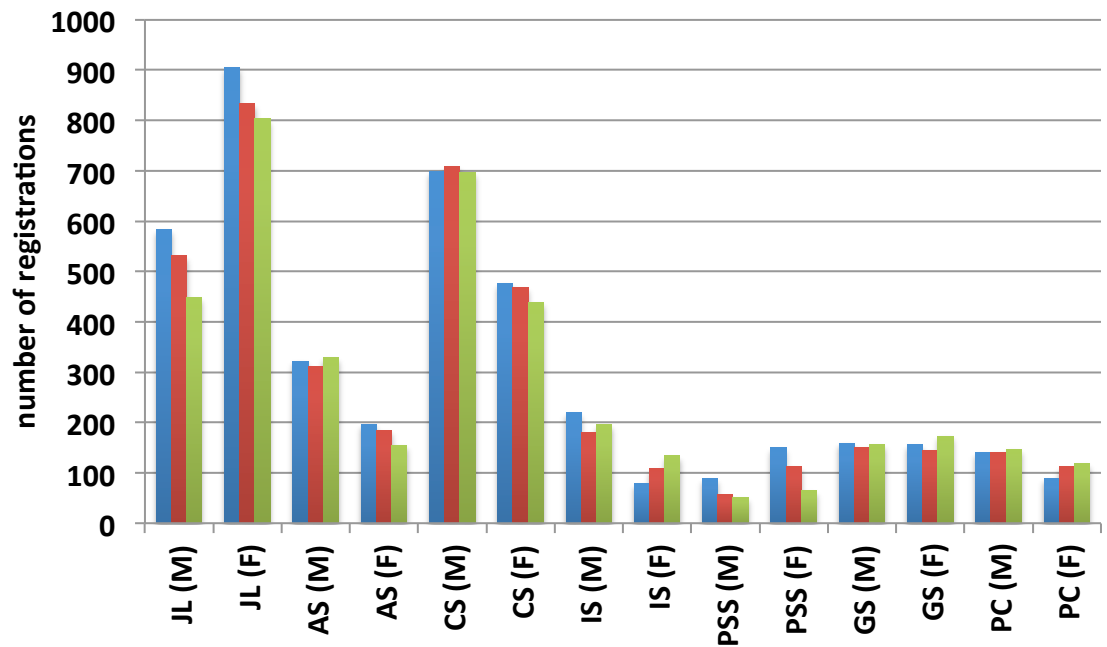
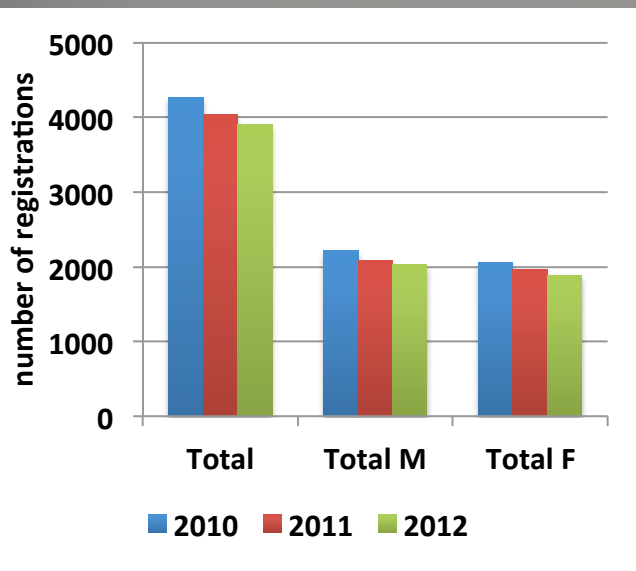
Chemistry – the last three years: %

	Total	Total M	Total F	JL (M)	JL (F)	AS (M)	AS (F)	CS (M)	CS (F)	IS (M)	IS (F)	PSS (M)	PSS (F)	GS (M)	GS (F)	PC (M)	PC (F)
2010	12.2	11.4	12.9	7.6	20.1	1.4	0.3	29.7	30.0	24.3	33.3	3.8	4.5	17.7	19.1	1.4	1.1
2011	11.7	10.9	12.4	7.1	18.0	2.1	0.3	24.9	25.2	27.9	41.1	2.2	4.5	21.1	25.1	2.1	1.6
2012	11.4	10.9	11.8	5.3	15.1	4.6	1.0	25.5	30.6	29.6	38.1	4.6	5.2	16.8	13.7	1.5	1.1



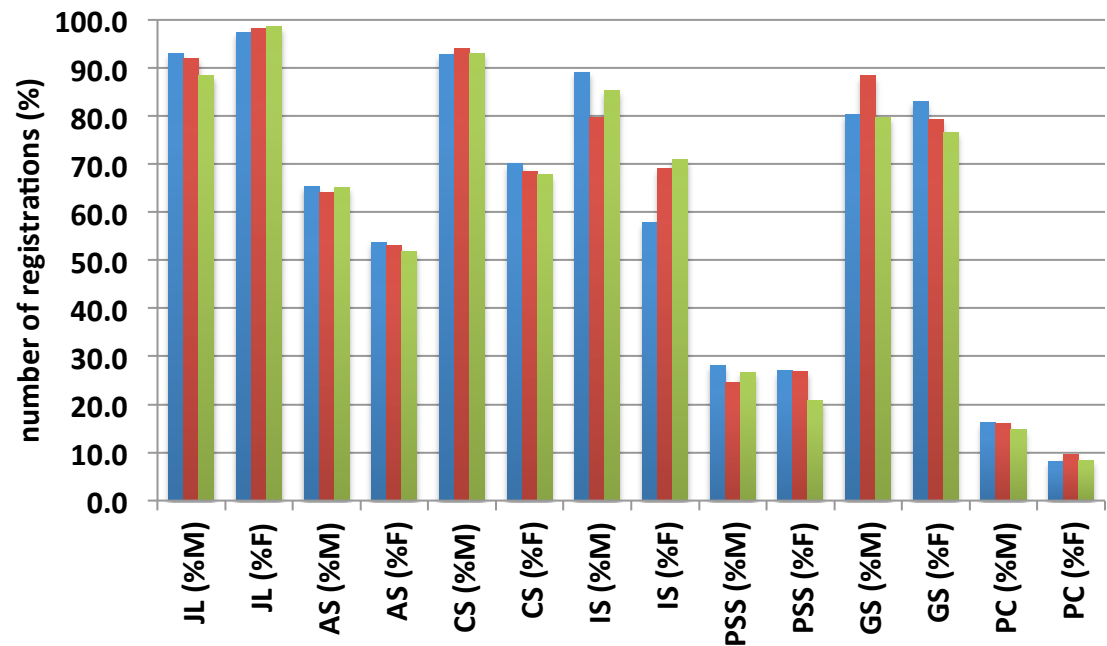
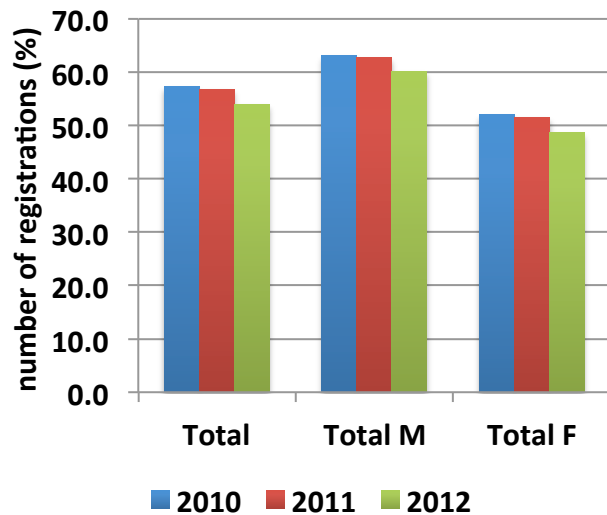
Physics – the last three years: N

	Total	Total M	Total F	JL (M)	JL (F)	AS (M)	AS (F)	CS (M)	CS (F)	IS (M)	IS (F)	PSS (M)	PSS (F)	GS (M)	GS (F)	PC (M)	PC (F)
2010	4265	2213	2052	584	905	322	197	699	477	220	78	88	150	159	156	141	89
2011	4044	2080	1964	531	833	311	184	709	468	180	109	57	113	151	145	141	112
2012	3911	2025	1886	449	803	329	155	697	439	196	134	52	64	156	173	146	118



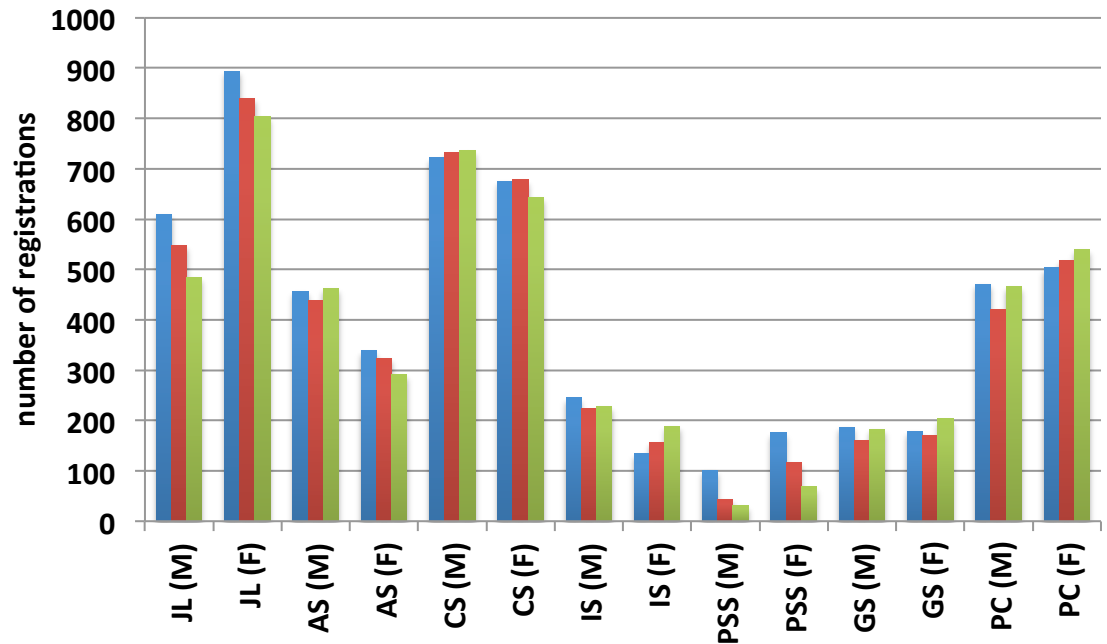
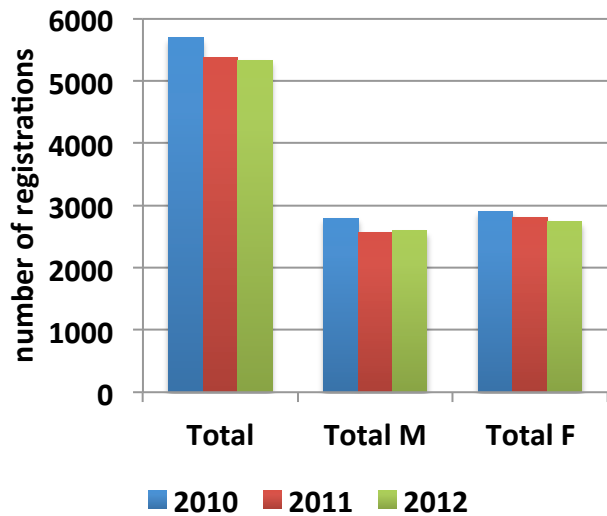
Physics – the last three years: %

	Total	Total M	Total F	JL (M)	JL (F)	AS (M)	AS (F)	CS (M)	CS (F)	IS (M)	IS (F)	PSS (M)	PSS (F)	GS (M)	GS (F)	PC (M)	PC (F)
2010	57.3	63.2	52.0	93.0	97.3	65.3	53.7	92.8	70.0	89.1	57.8	28.1	27.0	80.3	83.0	16.2	8.2
2011	56.7	62.7	51.5	92.0	98.2	64.1	53.0	94.0	68.5	79.6	69.0	24.6	26.8	88.3	79.2	16.1	9.5
2012	54.0	60.1	48.6	88.4	98.5	65.1	51.8	93.1	67.7	85.2	70.9	26.7	20.7	79.6	76.5	14.8	8.4



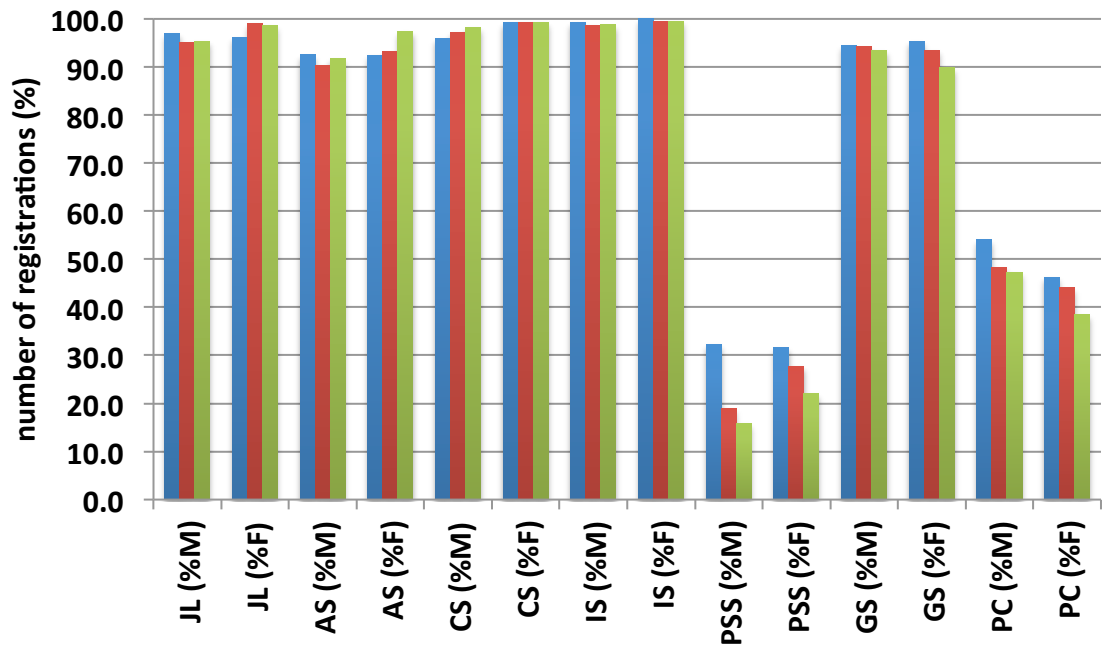
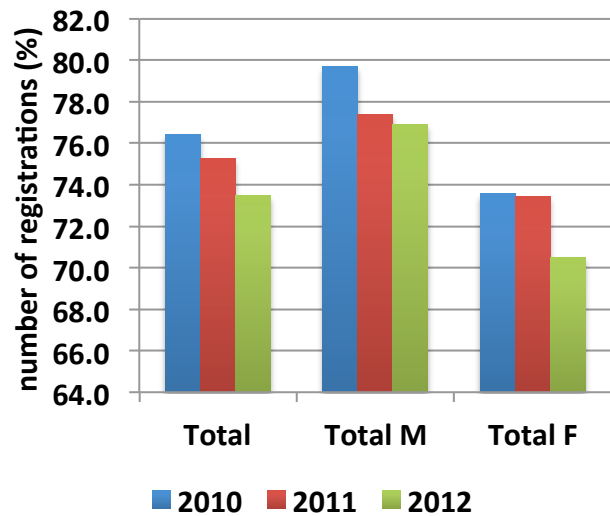
English Language – the last three years: N

	Total	Total M	Total F	JL (M)	JL (F)	AS (M)	AS (F)	CS (M)	CS (F)	IS (M)	IS (F)	PSS (M)	PSS (F)	GS (M)	GS (F)	PC (M)	PC (F)
2010	5692	2791	2901	609	894	456	339	722	675	245	135	101	176	187	179	471	503
2011	5371	2568	2803	548	839	438	323	733	678	223	157	44	117	161	171	421	518
2012	5326	2590	2736	484	804	463	291	736	643	227	188	31	68	183	203	466	539



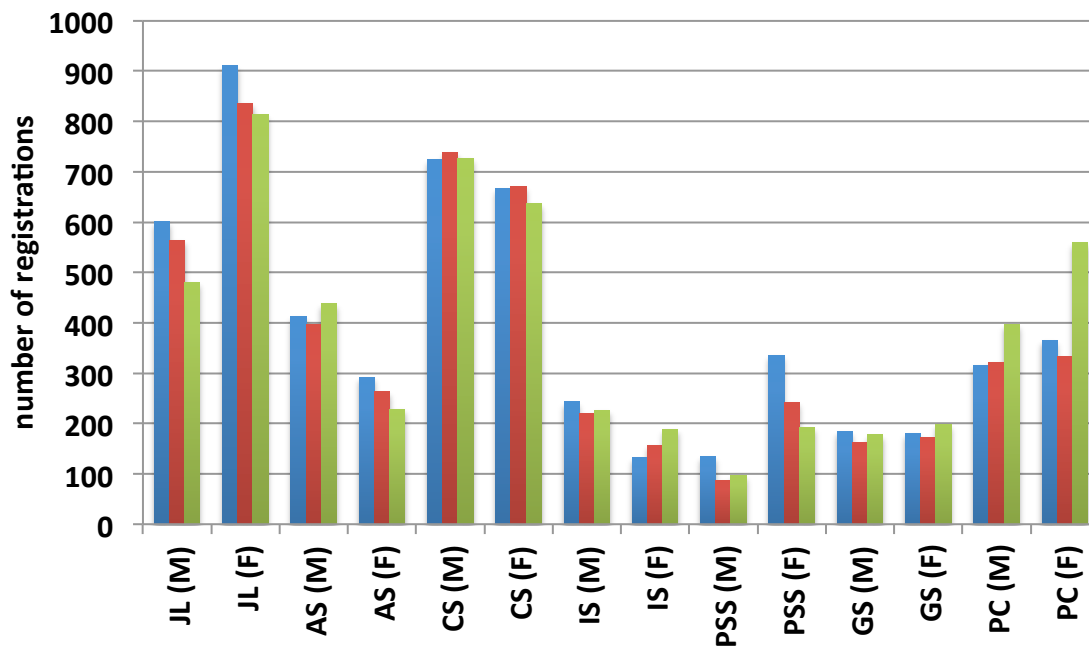
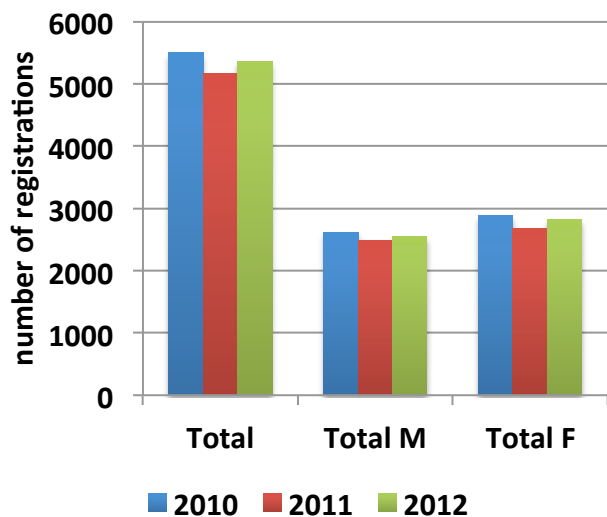
English Language – the last three years: %

	Total	Total M	Total F	JL (M)	JL (F)	AS (M)	AS (F)	CS (M)	CS (F)	IS (M)	IS (F)	PSS (M)	PSS (F)	GS (M)	GS (F)	PC (M)	PC (F)
2010	76.4	79.7	73.6	97.0	96.1	92.5	92.4	95.9	99.1	99.2	100.0	32.3	31.7	94.4	95.2	54.1	46.3
2011	75.3	77.4	73.5	95.0	98.9	90.3	93.1	97.2	99.3	98.7	99.4	19.0	27.7	94.2	93.4	48.2	44.1
2012	73.5	76.9	70.5	95.3	98.7	91.7	97.3	98.3	99.2	98.7	99.5	15.9	22.0	93.4	89.8	47.3	38.5



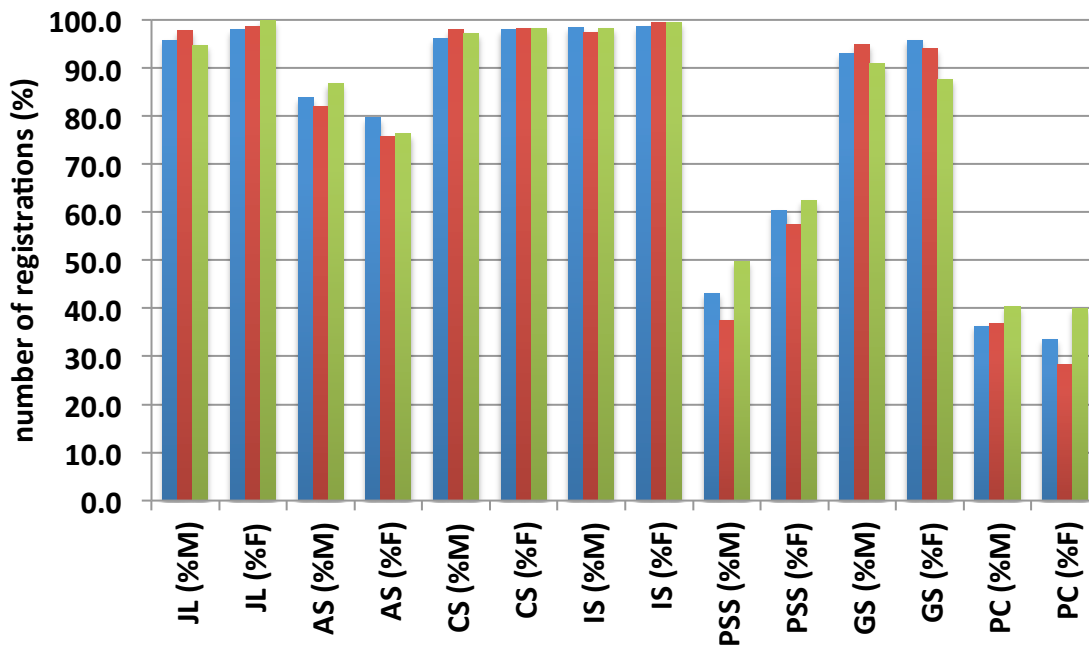
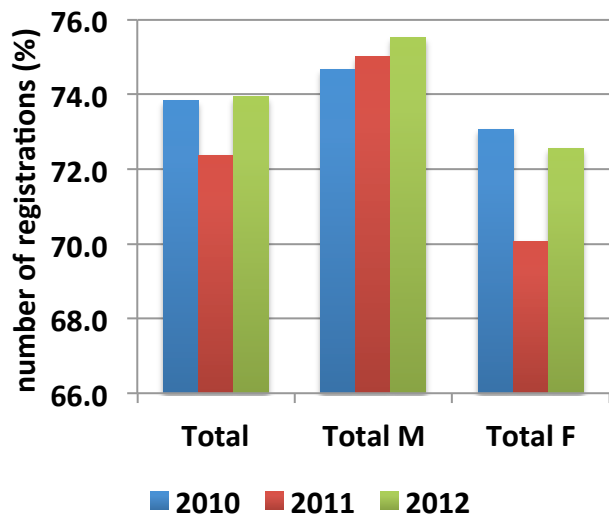
Mathematics – the last three years: N

	Total	Total M	Total F	JL (M)	JL (F)	AS (M)	AS (F)	CS (M)	CS (F)	IS (M)	IS (F)	PSS (M)	PSS (F)	GS (M)	GS (F)	PC (M)	PC (F)
2010	5498	2616	2882	601	911	413	292	724	667	243	133	135	335	184	180	316	364
2011	5164	2490	2674	564	836	397	263	738	671	220	157	87	242	162	172	322	333
2012	5359	2544	2815	481	813	438	228	727	636	226	188	97	193	178	198	397	559



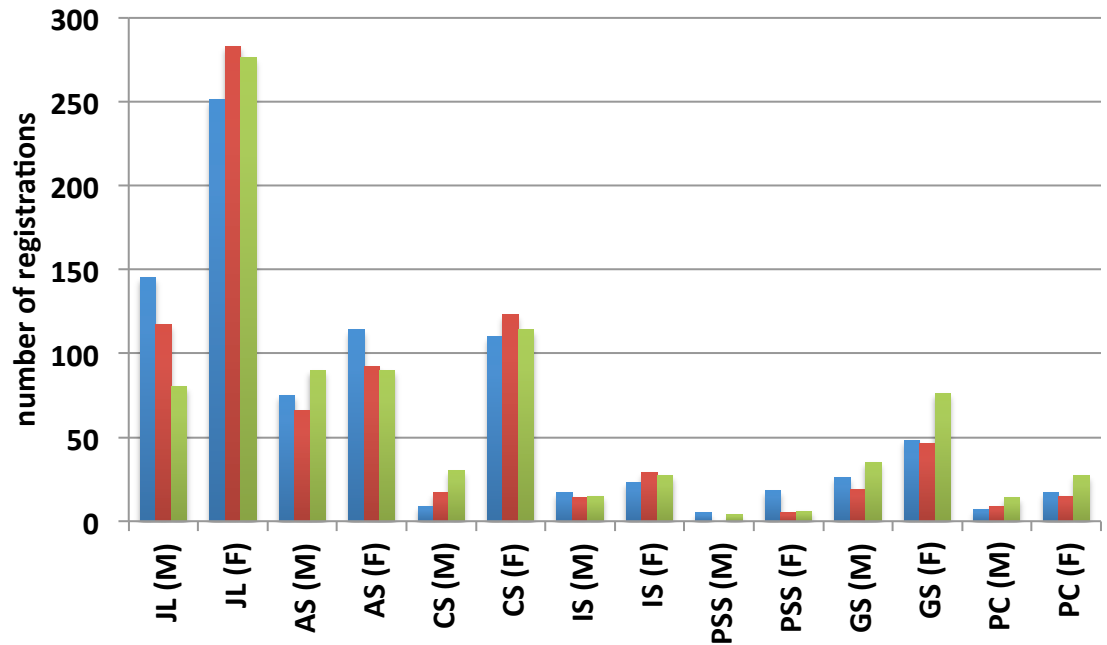
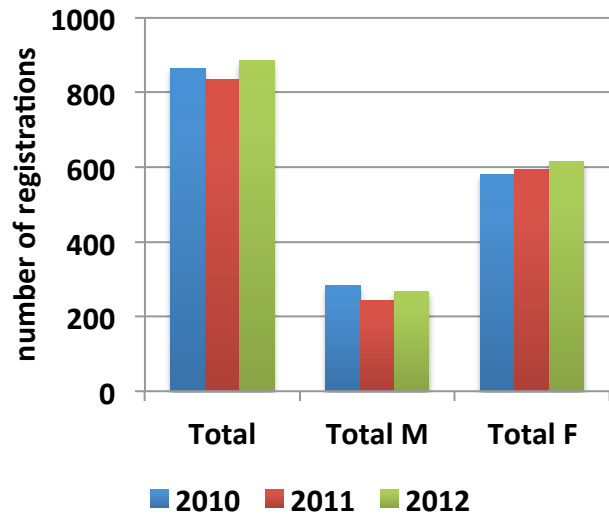
Mathematics – the last three years: %

	Total	Total M	Total F	JL (M)	JL (F)	AS (M)	AS (F)	CS (M)	CS (F)	IS (M)	IS (F)	PSS (M)	PSS (F)	GS (M)	GS (F)	PC (M)	PC (F)
2010	73.8	74.7	73.1	95.7	98.0	83.8	79.6	96.1	97.9	98.4	98.5	43.1	60.3	92.9	95.7	36.3	33.5
2011	72.4	75.0	70.1	97.7	98.6	81.9	75.8	97.9	98.2	97.3	99.4	37.5	57.3	94.7	94.0	36.8	28.3
2012	73.9	75.5	72.6	94.7	99.8	86.7	76.3	97.1	98.1	98.3	99.5	49.7	62.5	90.8	87.6	40.3	39.9



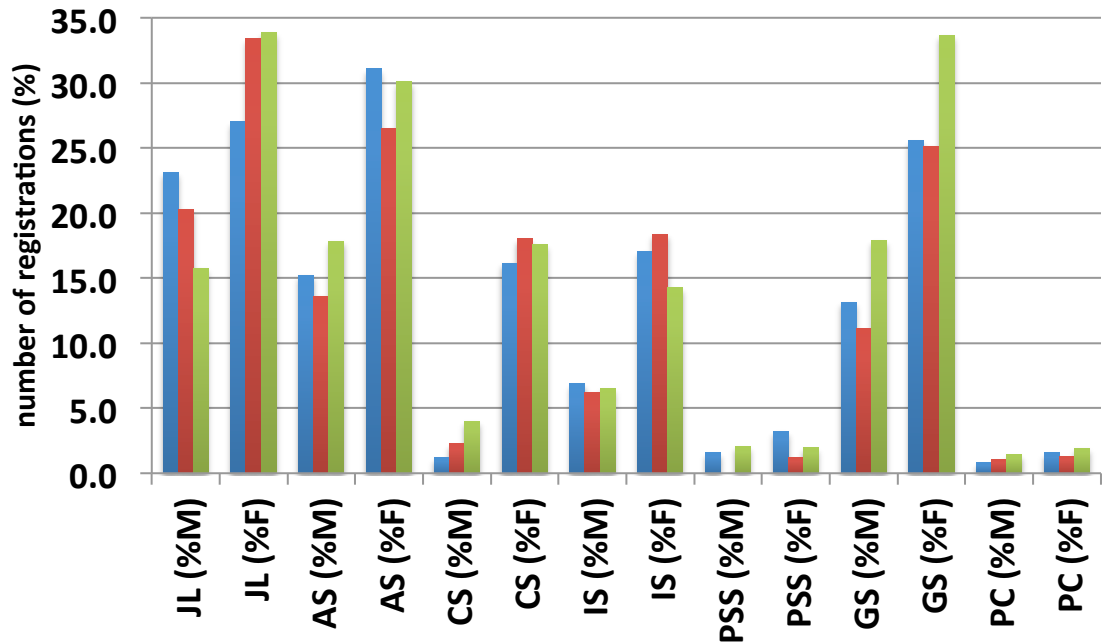
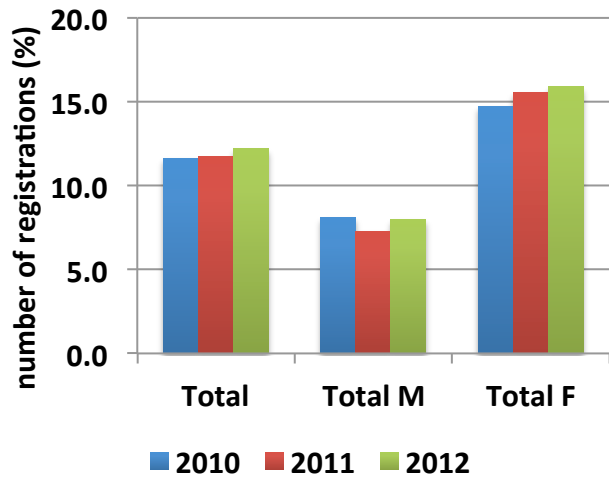
Home Economics – the last three years: N

	Total	Total M	Total F	JL (M)	JL (F)	AS (M)	AS (F)	CS (M)	CS (F)	IS (M)	IS (F)	PSS (M)	PSS (F)	GS (M)	GS (F)	PC (M)	PC (F)
2010	865	284	581	145	251	75	114	9	110	17	23	5	18	26	48	7	17
2011	835	242	593	117	283	66	92	17	123	14	29	0	5	19	46	9	15
2012	884	268	616	80	276	90	90	30	114	15	27	4	6	35	76	14	27



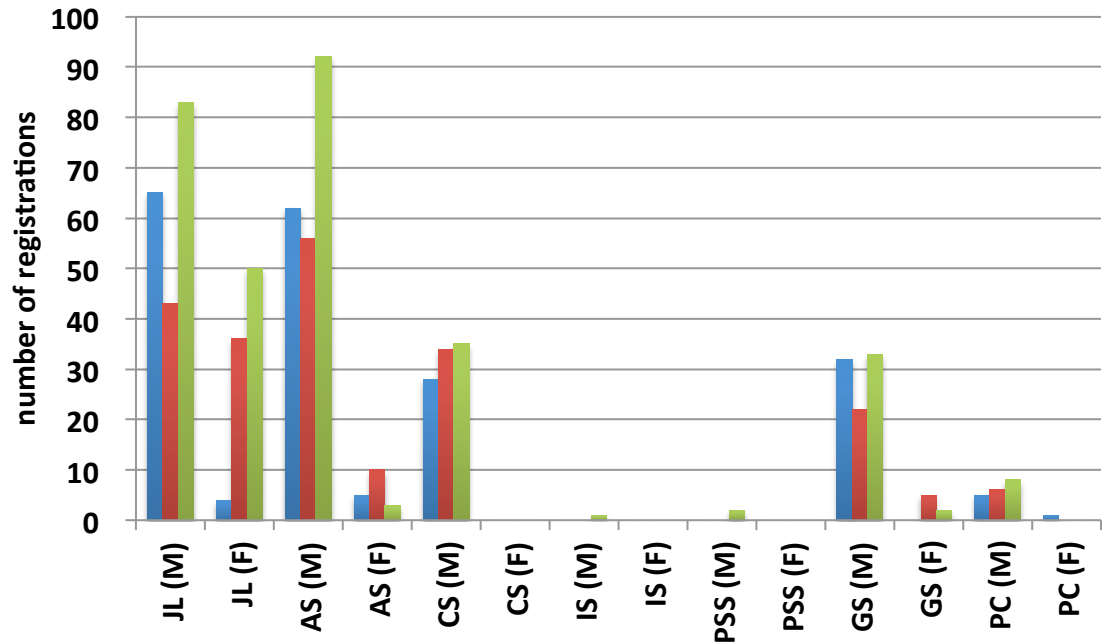
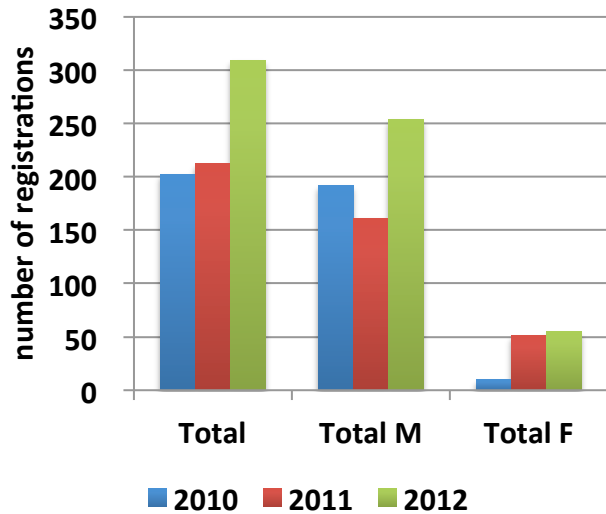
Home Economics – the last three years: %

	Total	Total M	Total F	JL (M)	JL (F)	AS (M)	AS (F)	CS (M)	CS (F)	IS (M)	IS (F)	PSS (M)	PSS (F)	GS (M)	GS (F)	PC (M)	PC (F)
2010	11.6	8.1	14.7	23.1	27.0	15.2	31.1	1.2	16.2	6.9	17.0	1.6	3.2	13.1	25.5	0.8	1.6
2011	11.7	7.3	15.5	20.3	33.4	13.6	26.5	2.3	18.0	6.2	18.4	0.0	1.2	11.1	25.1	1.0	1.3
2012	12.2	8.0	15.9	15.7	33.9	17.8	30.1	4.0	17.6	6.5	14.3	2.1	1.9	17.9	33.6	1.4	1.9



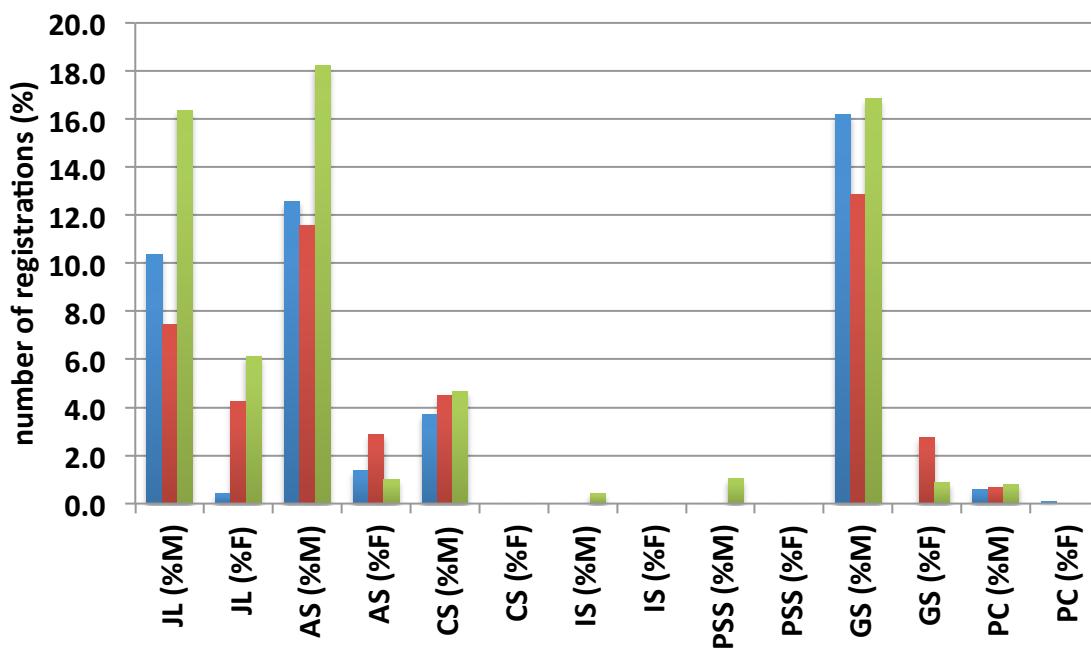
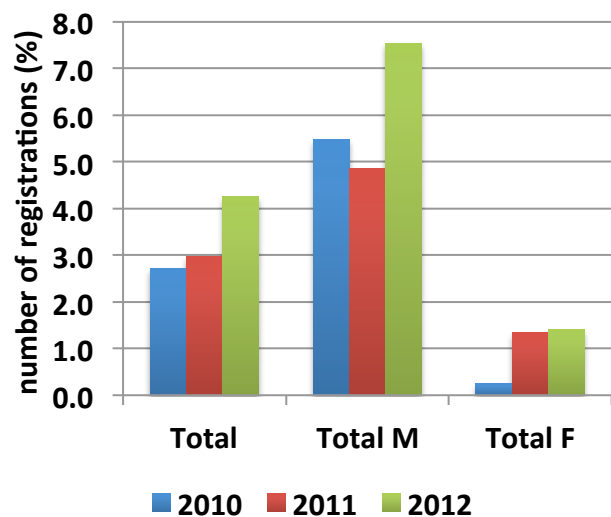
Design & Technology – the last three years: N

	Total	Total M	Total F	JL (M)	JL (F)	AS (M)	AS (F)	CS (M)	CS (F)	IS (M)	IS (F)	PSS (M)	PSS (F)	GS (M)	GS (F)	PC (M)	PC (F)
2010	202	192	10	65	4	62	5	28	0	0	0	0	0	32	0	5	1
2011	212	161	51	43	36	56	10	34	0	0	0	0	0	22	5	6	0
2012	309	254	55	83	50	92	3	35	0	1	0	2	0	33	2	8	0



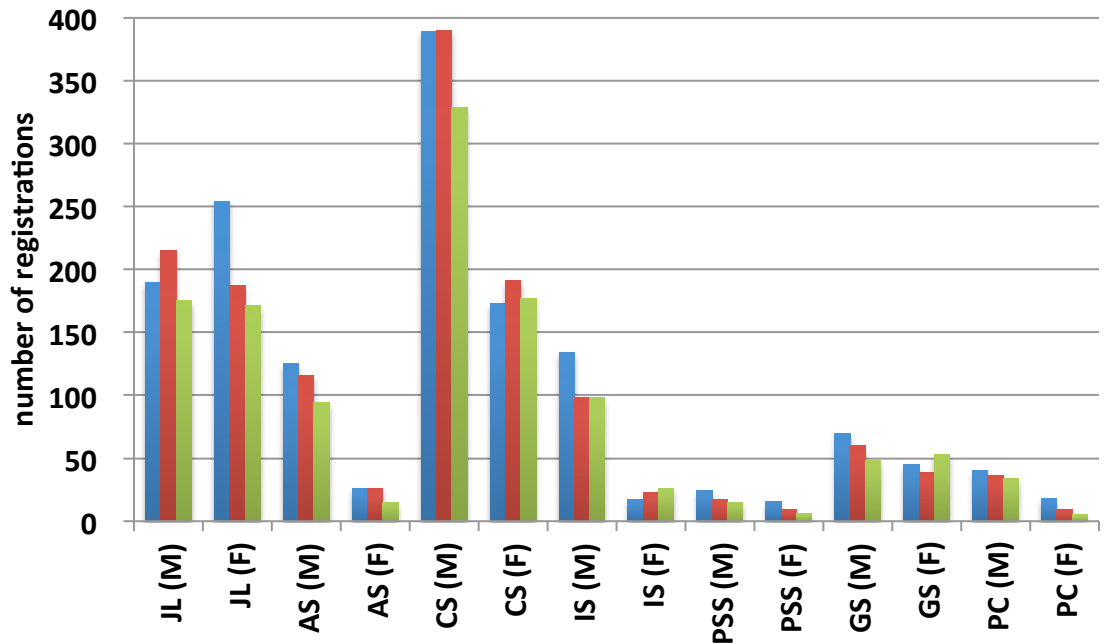
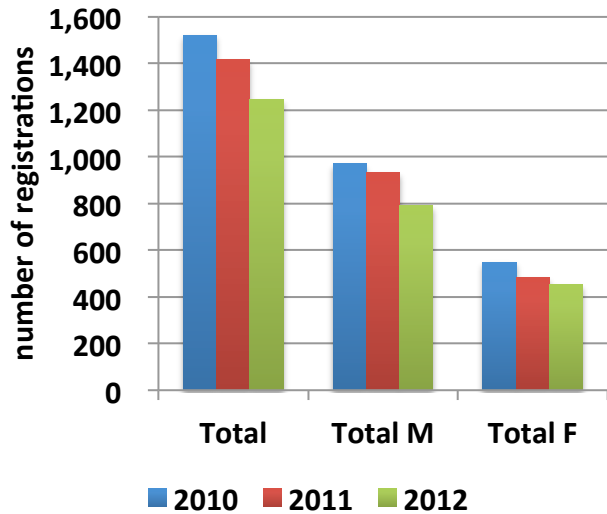
Design & Technology – the last three years: %

	Total	Total M	Total F	JL (M)	JL (F)	AS (M)	AS (F)	CS (M)	CS (F)	IS (M)	IS (F)	PSS (M)	PSS (F)	GS (M)	GS (F)	PC (M)	PC (F)
2010	2.7	5.5	0.3	10.4	0.4	12.6	1.4	3.7	0.0	0.0	0.0	0.0	0.0	16.2	0.0	0.6	0.1
2011	3.0	4.9	1.3	7.5	4.2	11.5	2.9	4.5	0.0	0.0	0.0	0.0	0.0	12.9	2.7	0.7	0.0
2012	4.3	7.5	1.4	16.3	6.1	18.2	1.0	4.7	0.0	0.4	0.0	1.0	0.0	16.8	0.9	0.8	0.0



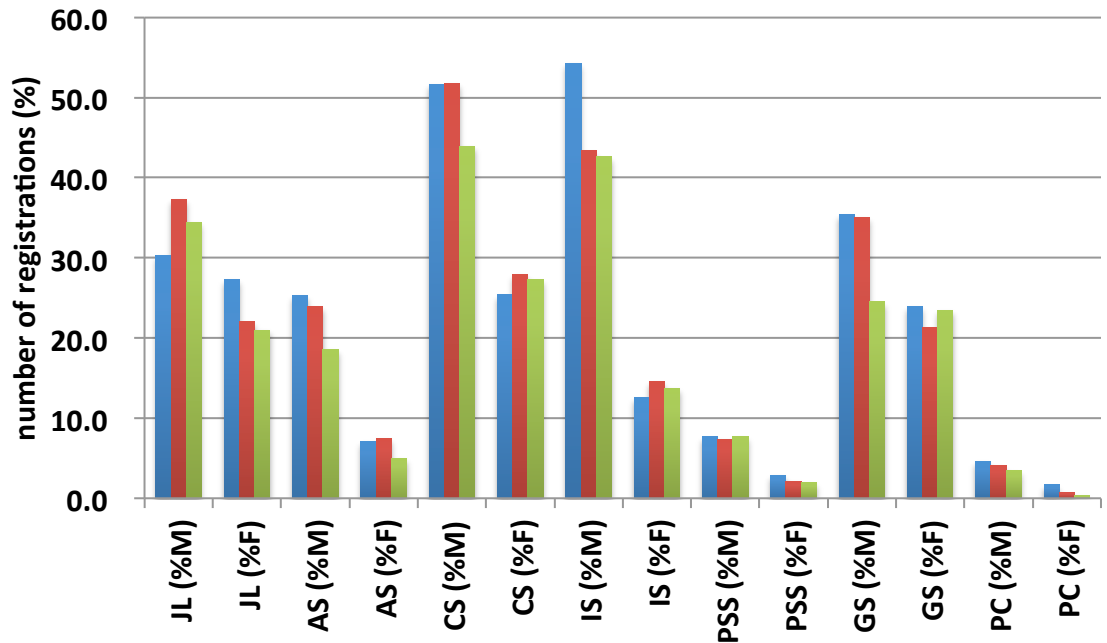
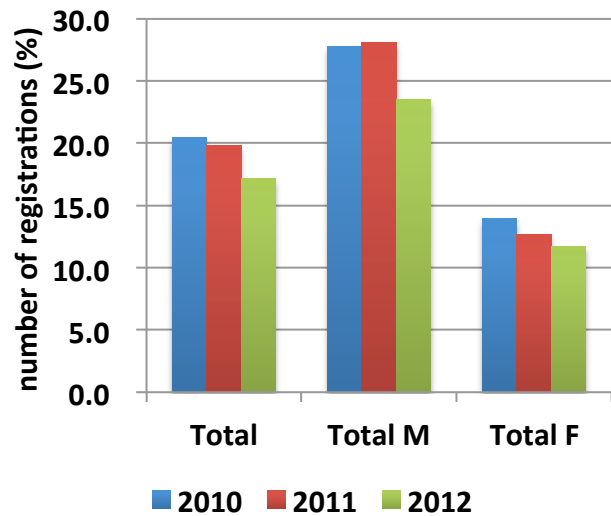
Computer Studies – the last three years: N

	Total	Total M	Total F	JL (M)	JL (F)	AS (M)	AS (F)	CS (M)	CS (F)	IS (M)	IS (F)	PSS (M)	PSS (F)	GS (M)	GS (F)	PC (M)	PC (F)
2010	1,521	972	549	190	254	125	26	389	173	134	17	24	16	70	45	40	18
2011	1,416	932	484	215	187	116	26	390	191	98	23	17	9	60	39	36	9
2012	1246	793	453	175	171	94	15	329	177	98	26	15	6	48	53	34	5



Computer Studies – the last three years: %

	Total	Total M	Total F	JL (M)	JL (F)	AS (M)	AS (F)	CS (M)	CS (F)	IS (M)	IS (F)	PSS (M)	PSS (F)	GS (M)	GS (F)	PC (M)	PC (F)
2010	20.4	27.7	13.9	30.3	27.3	25.4	7.1	51.7	25.4	54.3	12.6	7.7	2.9	35.4	23.9	4.6	1.7
2011	19.8	28.1	12.7	37.3	22.1	23.9	7.5	51.7	28.0	43.4	14.6	7.3	2.1	35.1	21.3	4.1	0.8
2012	17.2	23.5	11.7	34.4	21.0	18.6	5.0	43.9	27.3	42.6	13.8	7.7	1.9	24.5	23.5	3.5	0.4



The Sciences at Advanced and Intermediate levels

Number of candidates sitting for MC & SS

	2004			2005			2006			2007			2008			2009			2010			2011			2012		
	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot
MATRIC. CERT.	976	1257	2233	1028	1427	2455	1052	1498	2550	1071	1461	2532	995	1361	2356	989	1450	2439	1022	1392	2414	1002	1365	2367			3709
SINGLE SUBJECTS	478	700	1178	471	658	1129	435	649	1084	369	663	1032	411	699	1110	495	784	1279	467	903	1370	475	777	1252			
TOTAL CAND. (N)	1454	1957	3411	1499	2085	3584	1487	2147	3634	1440	2124	3564	1406	2060	3466	1484	2234	3718	1489	2295	3784	1477	2142	3619			3709
CANDIDATES (%)	42.6	57.4		41.8	58.2		40.9	59.1		40.4	59.6		40.6	59.4		39.9	60.1		39.3	60.7		40.8	59.2		0.0	0.0	

Number of candidates at Advanced Matriculation level

	2004			2005			2006			2007			2008			2009			2010			2011			2012		
	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot
Biology	126	246	372	181	368	549	166	376	542	196	398	594	178	351	529	222	440	662	239	433	672	237	395	632			642
Chemistry	116	191	307	163	234	397	143	234	377	181	260	441	159	226	385	191	288	479	205	309	514	220	244	464			444
Physics	324	128	452	360	157	515	350	176	526	393	170	563	387	173	560	345	193	538	294	161	455	327	167	494			499

Number of candidates (%) at Advanced Matriculation level

		2004			2005			2006			2007			2008			2009			2010			2011			2012		
		M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot
Biology	% of gender group	8.7	12.6	10.9	12.1	17.6	15.3	11.2	17.5	14.9	13.6	18.7	16.7	12.7	17.0	15.3	15.0	19.7	17.8	16.1	18.9	17.8	16.0	18.4	17.5			17.3
	% of total	3.7	7.2	10.9	5.1	10.3	15.3	4.6	10.3	14.9	5.5	11.2	16.7	5.1	10.1	15.3	6.0	11.8	17.8	6.3	11.4	17.8	6.5	10.9	17.5			17.3
Chemistry	% of gender group	8.0	9.8	9.0	10.9	11.2	11.1	9.6	10.9	10.4	12.6	12.2	12.4	11.3	11.0	11.1	12.9	12.9	12.9	13.8	13.5	13.6	14.9	11.4	12.8			12.0
	% of total	3.4	5.6	9.0	4.5	6.5	11.1	3.9	6.4	10.4	5.1	7.3	12.4	4.6	6.5	11.1	5.1	7.7	12.9	5.4	8.2	13.6	6.1	6.7	12.8			12.0
Physics	% of gender group	22.3	6.5	13.3	24.0	7.5	14.4	23.5	8.2	14.5	27.3	8.0	15.8	27.5	8.4	16.2	23.2	8.6	14.5	19.7	7.0	12.0	22.1	7.8	13.7			13.5
	% of total	9.5	3.8	13.3	10.0	4.4	14.4	9.6	4.8	14.5	11.0	4.8	15.8	11.2	5.0	16.2	9.3	5.2	14.5	7.8	4.3	12.0	9.0	4.6	13.7			13.5

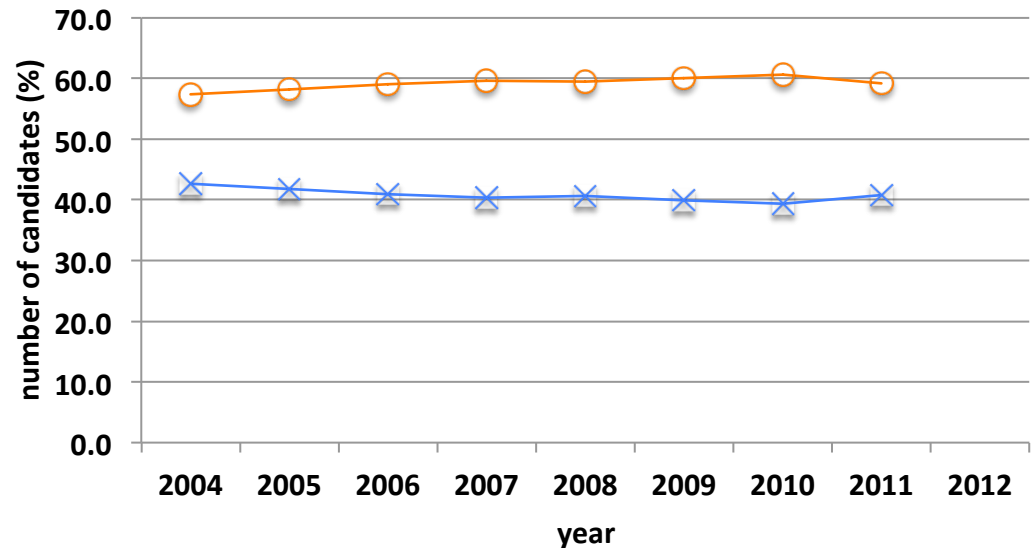
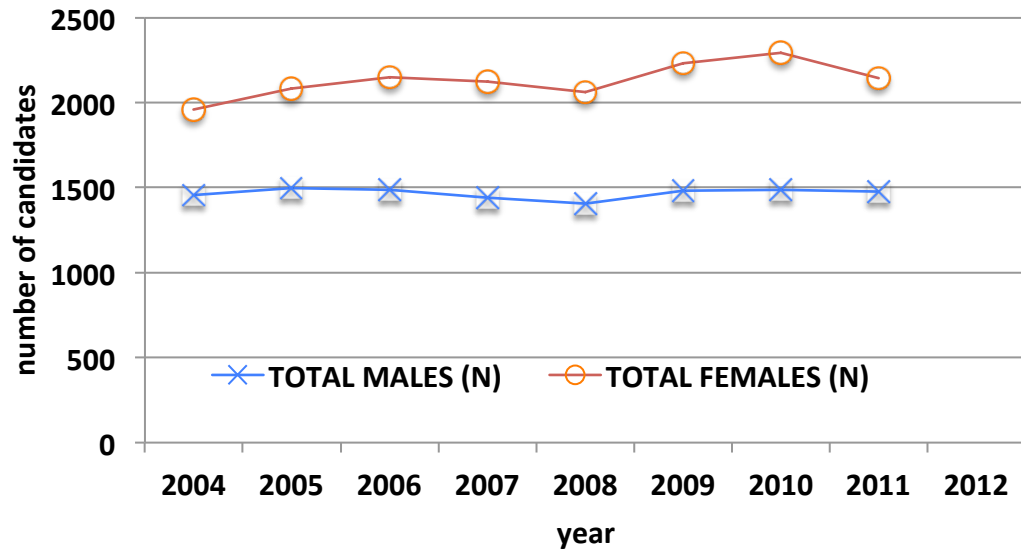
Number of candidates at Intermediate Matriculation level

	2004			2005			2006			2007			2008			2009			2010			2011			2012		
	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot
Biology	111	180	291	32	183	215	40	175	215	39	171	210	40	168	208	46	178	224	41	199	240	53	233	286			230
Chemistry	2	14	16	8	11	19	18	16	34	6	26	32	16	22	38	14	43	57	24	46	70	18	33	51			51
Physics	182	246	428	206	316	522	223	372	595	270	379	649	265	358	623	320	439	759	365	421	786	396	425	821			713

Number of candidates (%) at Intermediate Matriculation level

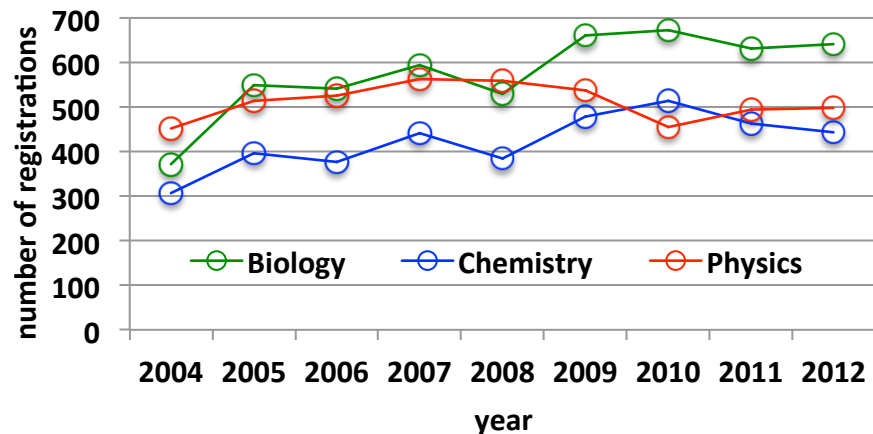
		2004			2005			2006			2007			2008			2009			2010			2011			2012		
		M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot
Biology	% of gender group	7.6	9.2	8.5	2.1	8.8	6.0	2.7	8.2	5.9	2.7	8.1	5.9	2.8	8.2	6.0	3.1	8.0	6.0	2.8	8.7	6.3	3.6	10.9	7.9			6.2
	% of total	3.3	5.3	8.5	0.9	5.1	6.0	1.1	4.8	5.9	1.1	4.8	5.9	1.2	4.8	6.0	1.2	4.8	6.0	1.1	5.3	6.3	1.5	6.4	7.9			6.2
Chemistry	% of gender group	0.1	0.7	0.5	0.5	0.5	0.5	1.2	0.7	0.9	0.4	1.2	0.9	1.1	1.1	1.1	0.9	1.9	1.5	1.6	2.0	1.8	1.2	1.5	1.4			1.4
	% of total	0.1	0.4	0.5	0.2	0.3	0.5	0.5	0.4	0.9	0.2	0.7	0.9	0.5	0.6	1.1	0.4	1.2	1.5	0.6	1.2	1.8	0.5	0.9	1.4			1.4
Physics	% of gender group	12.5	12.6	12.5	13.7	15.2	14.6	15.0	17.3	16.4	18.8	17.8	18.2	18.8	17.4	18.0	21.6	19.7	20.4	24.5	18.3	20.8	26.8	19.8	22.7			19.2
	% of total	5.3	7.2	12.5	5.7	8.8	14.6	6.1	10.2	16.4	7.6	10.6	18.2	7.6	10.3	18.0	8.6	11.8	20.4	9.6	11.1	20.8	10.9	11.7	22.7			19.2

The exam population: gender

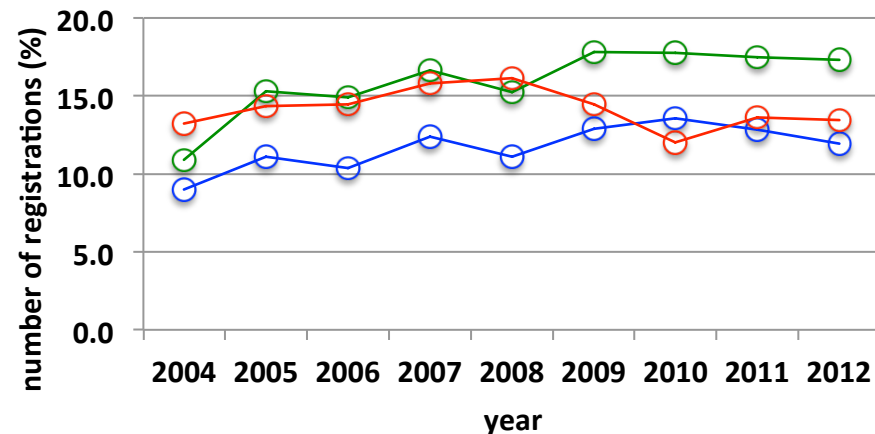


AM & IM level Sciences: Total exam populations

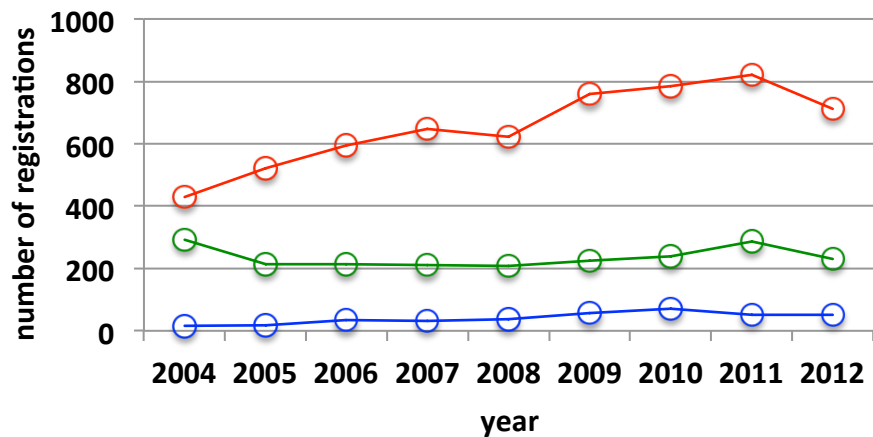
Advanced Matriculation - Total (N)



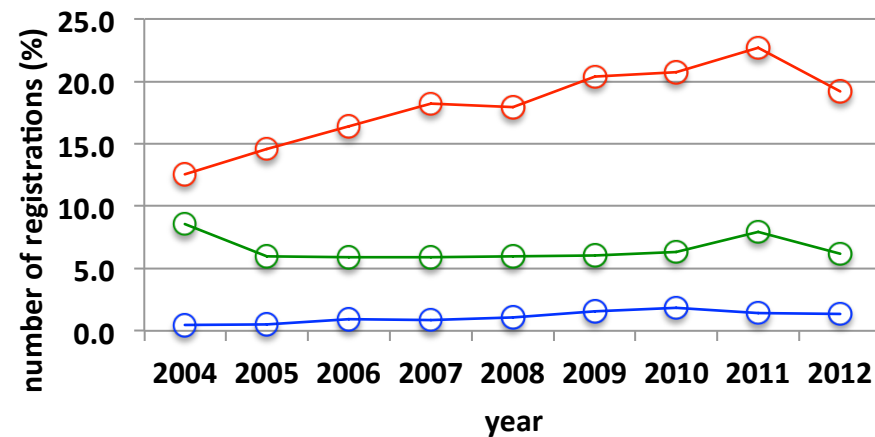
Advanced Matriculation - Total (%)



Intermediate Matriculation - Total (N)

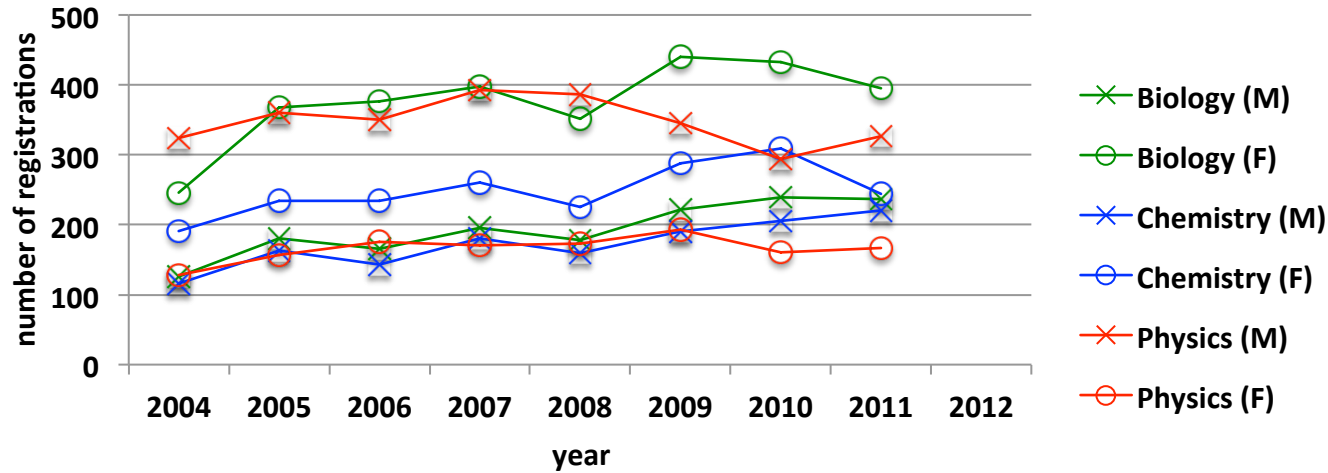


Intermediate Matriculation - Total (%)

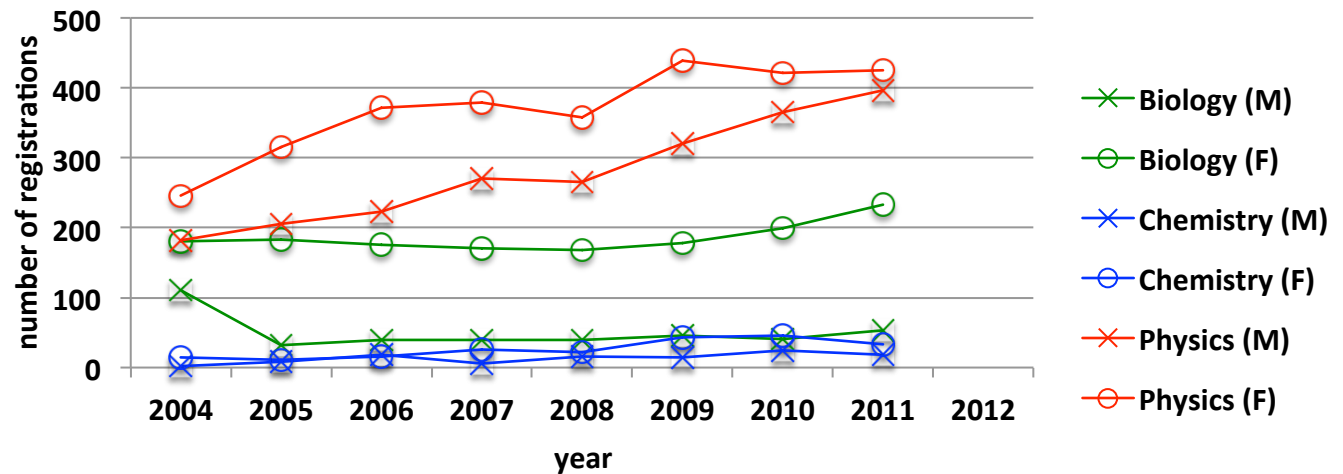


AM & IM Sciences: number of registrations by gender

Advanced Matriculation (N)

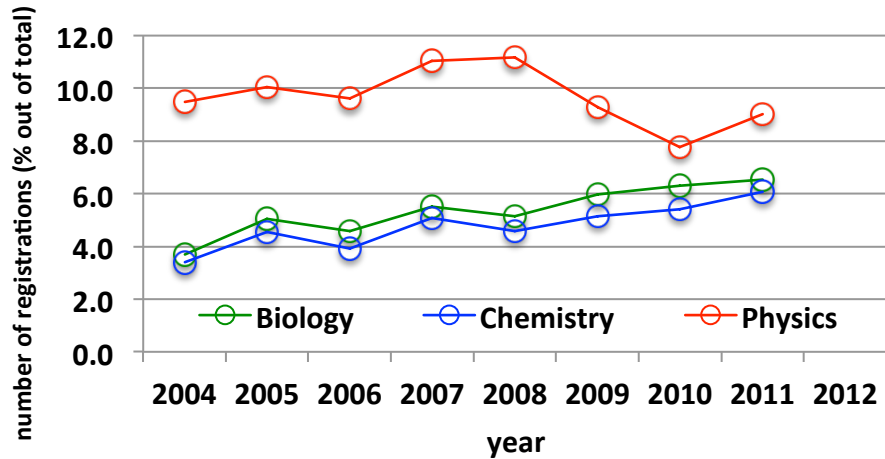


Intermediate Matriculation (N)

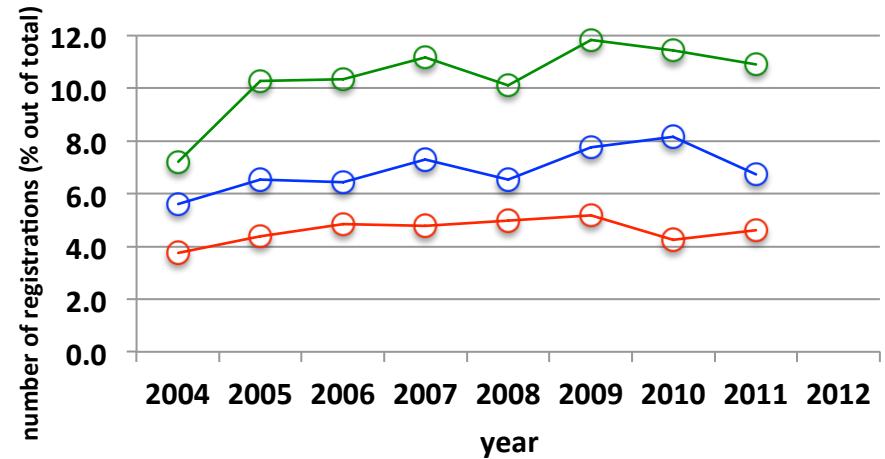


AM Sciences: % out of total and gender group

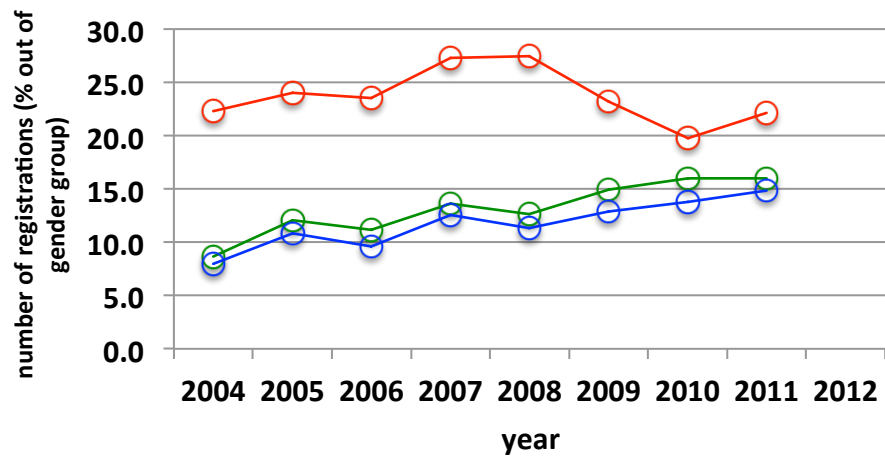
Advanced Matriculation: Males (% out of total)



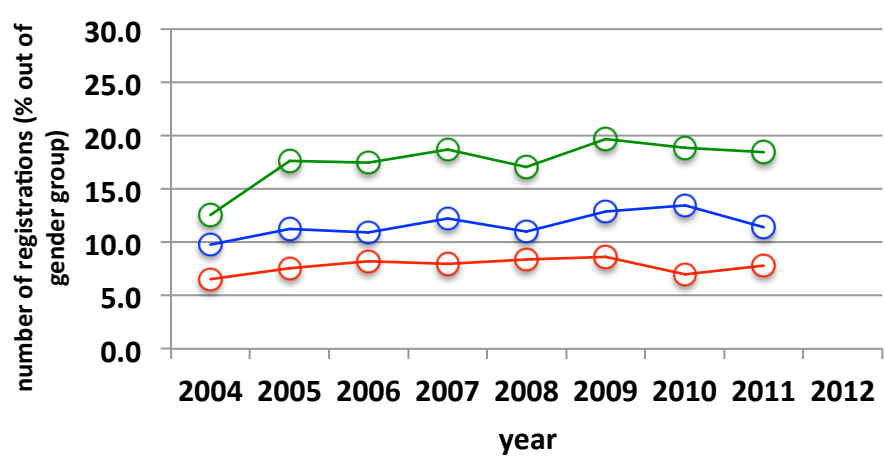
Advanced Matriculation: Females (% out of total)



Advanced Matriculation: Males (% of gender group)

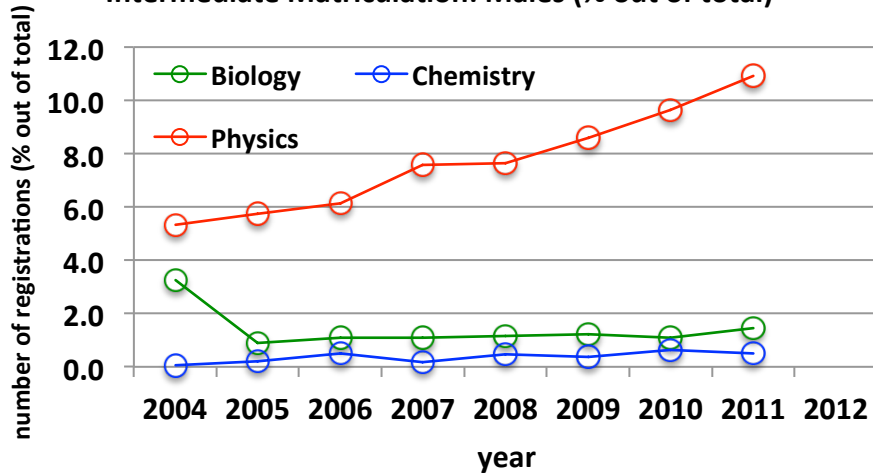


Advanced Matriculation: Females (% of gender group)

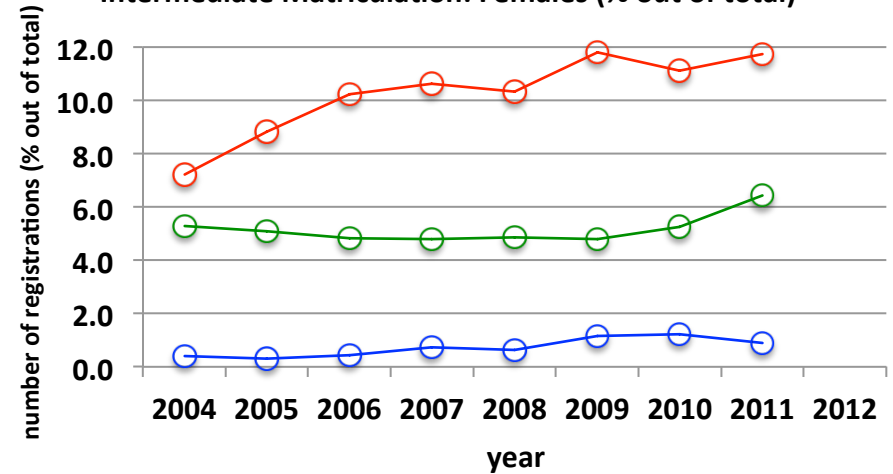


IM Sciences: % of total & gender group

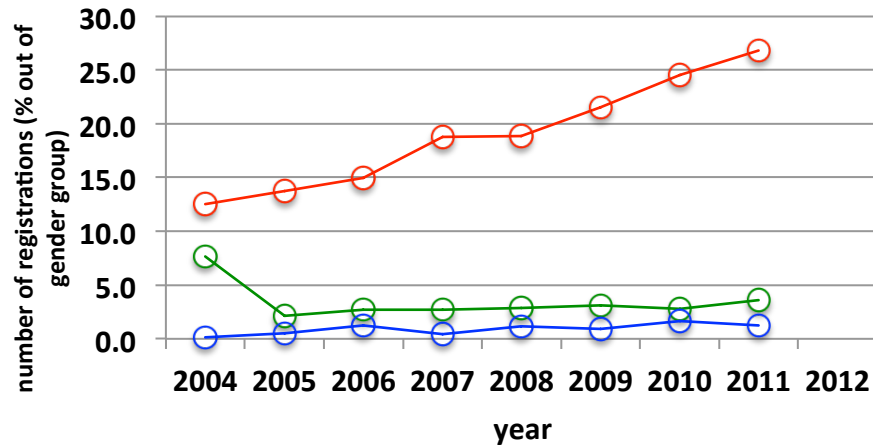
Intermediate Matriculation: Males (% out of total)



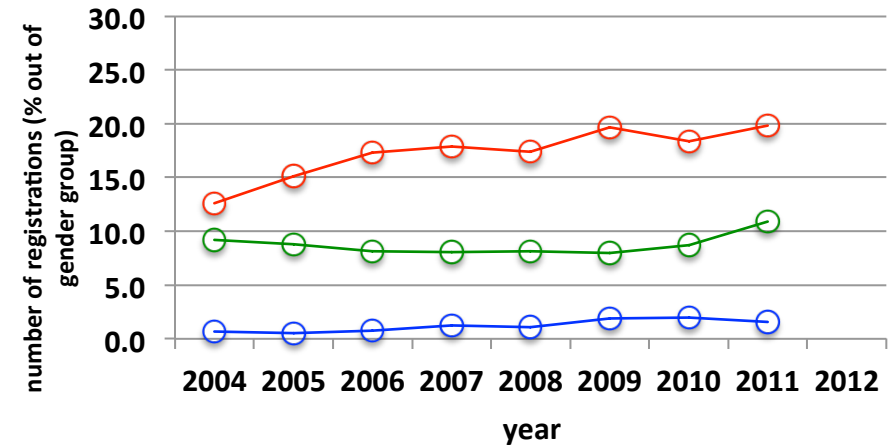
Intermediate Matriculation: Females (% out of total)



Intermediate Matriculation: Males (% of gender group)



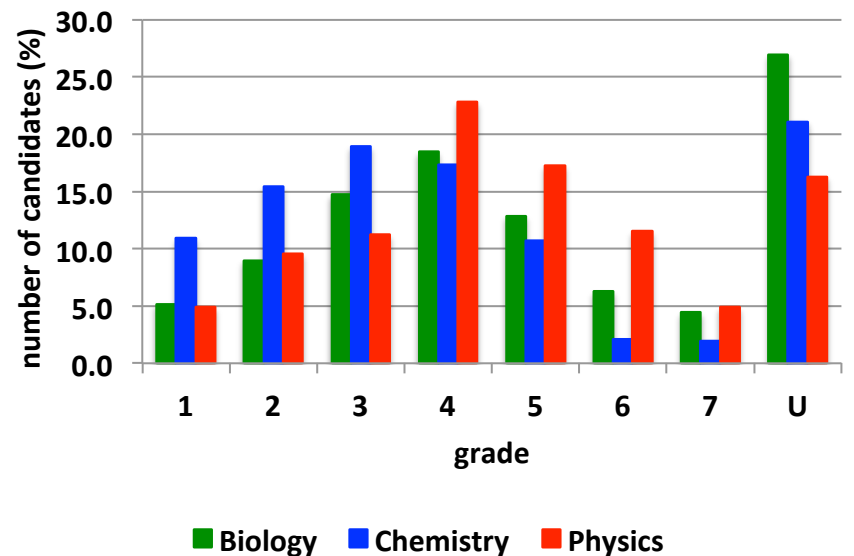
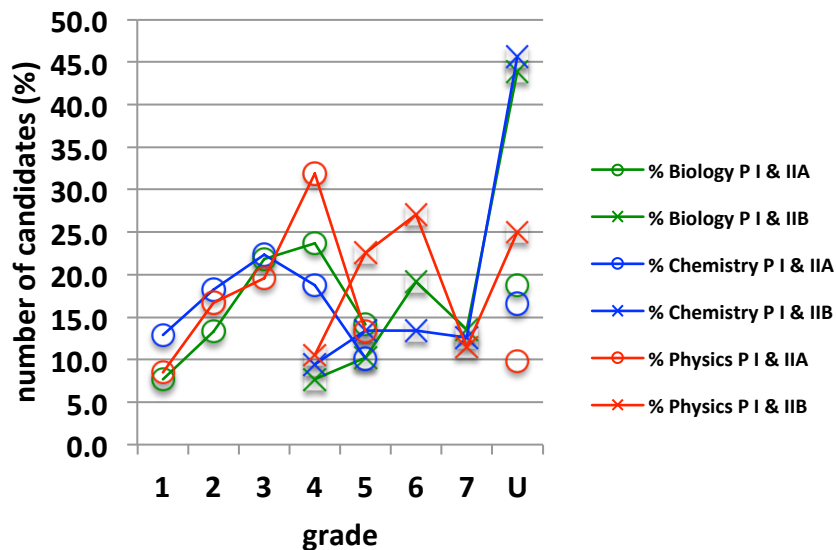
Intermediate Matriculation: Females (% of gender group)



The performance: SEC

	1	2	3	4	5	6	7	U	abs	Totals
Biology P I & IIA	76	132	216	234	140			185	6	989
% Biology P I & IIA	7.7	13.3	21.8	23.7	14.2			18.7	0.6	100.0
Biology P I & IIB				37	49	92	65	211	26	480
% Biology P I & IIB				7.7	10.2	19.2	13.5	44.0	5.4	100.0
Chemistry P I & IIA	90	127	156	131	71			116	7	698
% Chemistry P I & IIA	12.9	18.2	22.3	18.8	10.2			16.6	1.0	100.0
Chemistry P I & IIB				12	17	17	16	58	7	127
% Chemistry P I & IIB				9.4	13.4	13.4	12.6	45.7	5.5	100.0
Physics P I & IIA	191	374	439	716	300			220	6	2246
% Physics P I & IIA	8.5	16.7	19.5	31.9	13.4			9.8	0.3	100.0
Physics P I & IIB				175	375	450	191	417	57	1665
% Physics P I & IIB				10.5	22.5	27.0	11.5	25.0	3.4	100.0

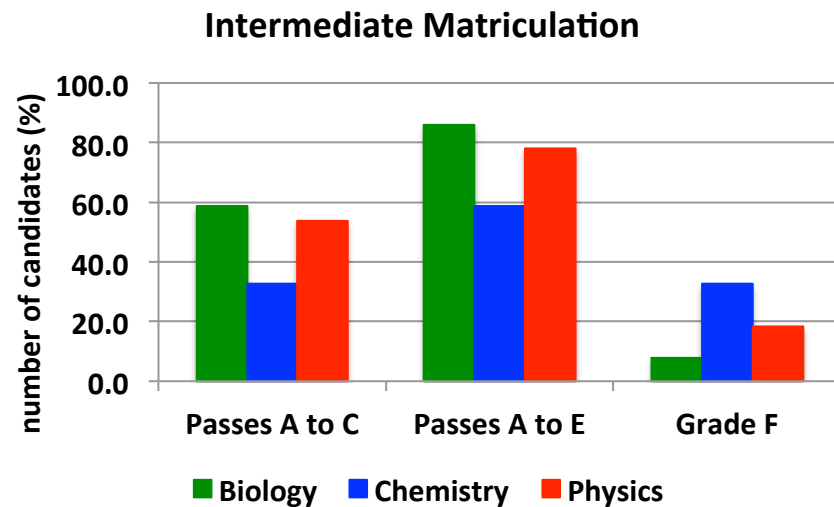
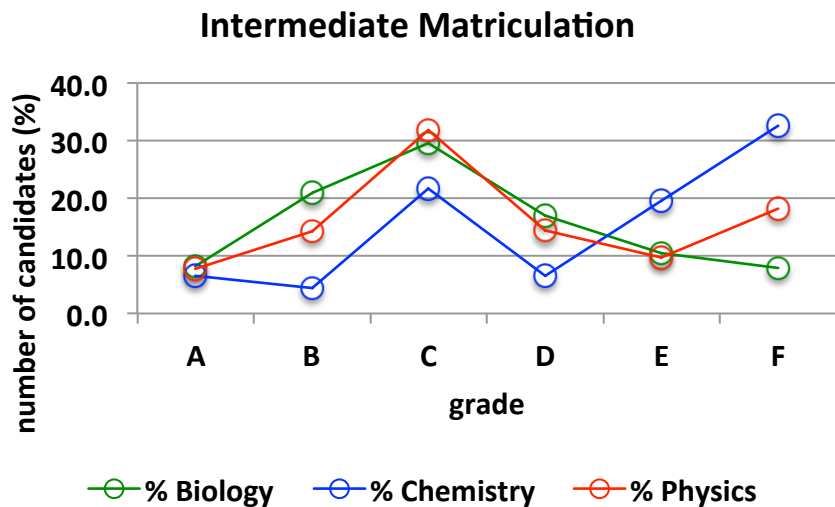
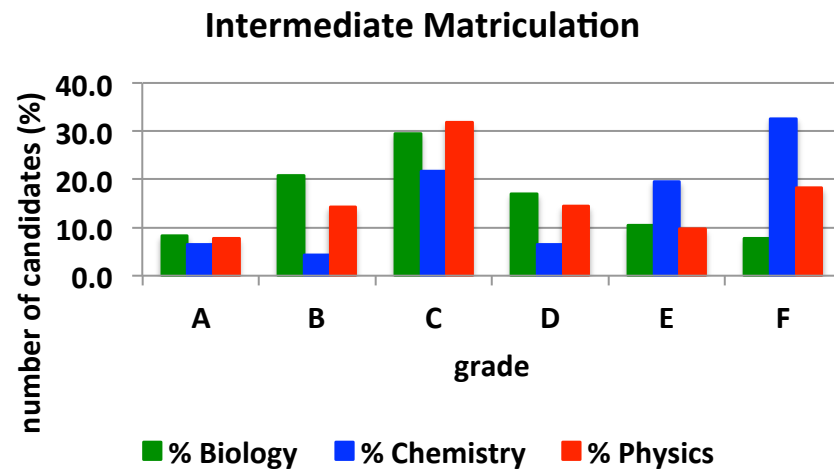
	1	2	3	4	5	6	7	U	abs
Biology	5.2	9.0	14.7	18.4	12.9	6.3	4.4	27.0	2.2
Chemistry	10.9	15.4	18.9	17.3	10.7	2.1	1.9	21.1	1.7
Physics	4.9	9.6	11.2	22.8	17.3	11.5	4.9	16.3	1.6



The performance: Intermediate Matriculation

	A	B	C	D	E	F	abs	
Biology	19	48	68	39	24	18	14	230
% Biology	8.3	20.9	29.6	17.0	10.4	7.8	6.1	100.0
Chemistry	3	2	10	3	9	15	4	46
% Chemistry	6.5	4.3	21.7	6.5	19.6	32.6	8.7	100.0
Physics	55	102	227	103	69	130	27	713
% Physics	7.7	14.3	31.8	14.4	9.7	18.2	3.8	100.0

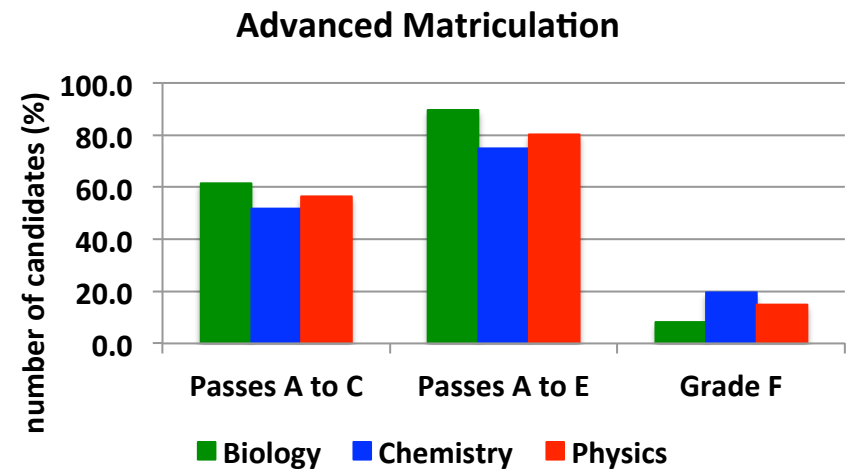
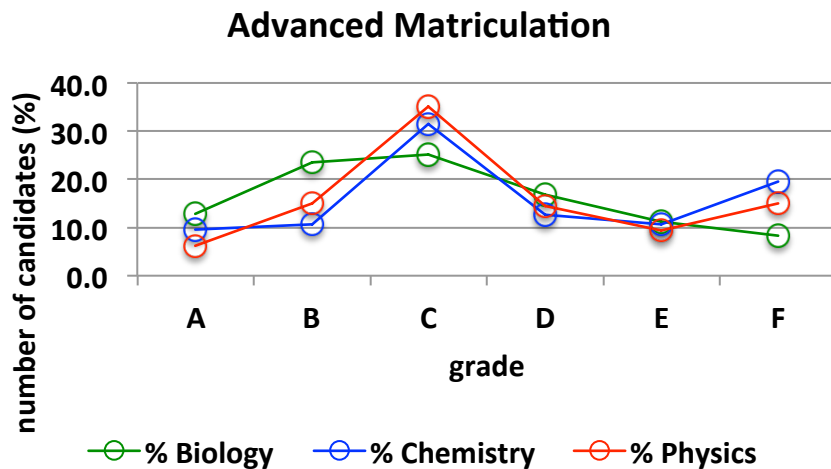
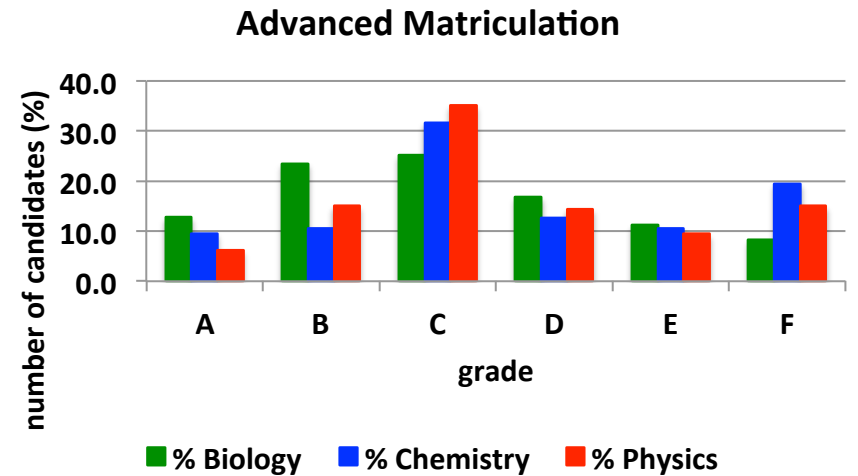
	Passes A to C	Passes A to E	Grade F
Biology	58.7	86.1	7.8
Chemistry	32.6	58.7	32.6
Physics	53.9	78.0	18.2



The performance: Advanced Matriculation

	A	B	C	D	E	F	abs	
Biology	82	151	162	108	72	53	14	642
% Biology	12.8	23.5	25.2	16.8	11.2	8.3	2.2	100.0
Chemistry	45	50	149	60	50	92	26	472
% Chemistry	9.5	10.6	31.6	12.7	10.6	19.5	5.5	100.0
Physics	31	75	175	72	47	75	24	499
% Physics	6.2	15.0	35.1	14.4	9.4	15.0	4.8	100.0

	Passes A to C	Passes A to E	Grade F
Biology	61.5	89.6	8.3
Chemistry	51.7	75.0	19.5
Physics	56.3	80.2	15.0



Conclusions . . .

- More females sit for science examinations at SEC level
- No significant displacement factor from the science to other subjects although there is an internal displacement
- Displacement from foreign languages to other options – primarily boys tend to go for the ‘softer’ subjects
- Gender difference in Biology at all levels and in Physics at AM level