



The Importance of University Lecture Attendance

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This study analyses undergraduate class attendance as reported by teaching staff in their responses to the Annual Teaching Survey for the 2003/2004 academic year. Average figures for class attendance are not only compared with a number of benchmarks such as Pass Rates, Efficiency Rates and average time taken to graduate, but also with satisfaction with teaching, as expressed by students in the same survey.

Key Words: Pass Rate, Efficiency Rate, Class Attendance, Correlations.

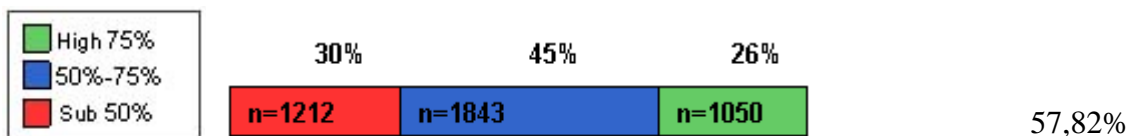
1. INTRODUCTION.

Logically, one of the most consistent benchmarks, or indicators, of the concept of Academic Success is the Pass Rate (the percentage of exam passes per registered students). An understanding of the factors that affect this indicator is of considerable importance, and our previous work studied the relationship between Performance or Pass Rates and Satisfaction with the Quality of Teaching, as expressed by the student body (Fernández Rico et al, 2003). This study showed that there are a range of other factors, including the teaching-learning process, one-to-one attention for the student, percentage levels of students who sit for exams and the scientific field of the qualification, all of which seem to have some impact on both these benchmarks, notwithstanding the tendency for subjects with a higher pass rate to also score higher on satisfaction levels.

Continuing of our line of research into Quality Evaluation in Higher Education and as a follow-up to the above-mentioned work, this study sets out to estimate the importance of *class attendance* at our University. It considers a degree or qualification as a unit of study and analyses the relationship between class attendance levels and a set of variables linked to academic success, such as pass rate, academic efficiency, the number of students registered for a course and satisfaction with the teaching received.

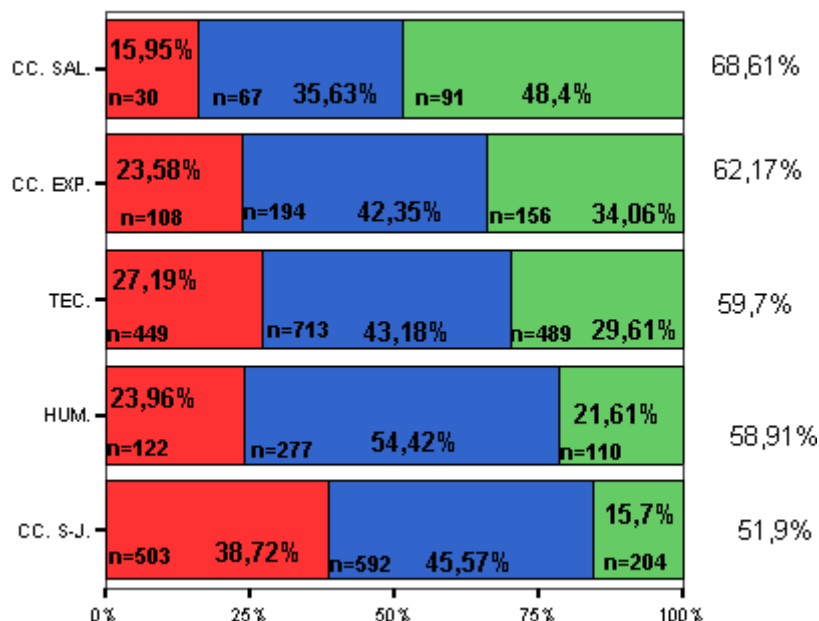
2. CLASS ATTENDANCE AT UNIVERSITY DEGREE COURSES.

As estimated by teaching staff, average class attendance for the University of Oviedo as a whole stands at 57,82%. This percentage is spread symmetrically, for the most part between the 50-75% boundaries, although there are marked differences depending on the type of studies involved. Thus, for example, whilst average attendance at Health Science courses stands at almost 70%, social and legal science courses hardly reach the 50% mark.





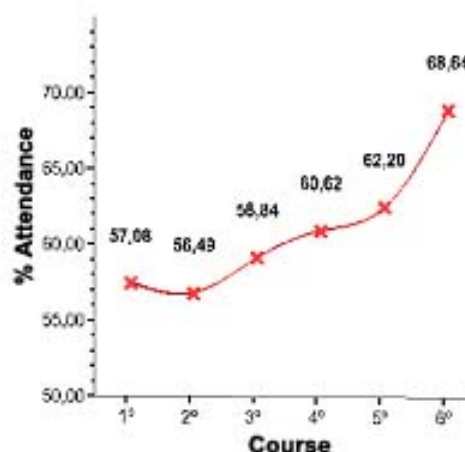
Distribution according to courses



Distribution across courses.

One of the most frequently held beliefs in university circles is that class attendance at first year courses is lower than for final year courses. However, the figures shown here seem to belie such a belief. Overall, the expected tendency towards ‘more attendance the higher the level of the course’ is confirmed. The norm is vindicated, for example, in Experimental Sciences courses. However, in Social and Legal Sciences, lowest attendance occurs in the fifth year of the course, and in Health Sciences, first year students head attendance figures. The final courses in Humanities are more poorly attended than the two earlier years of the same courses, and in technical degree courses attendance increases over the first three years, falls off in the fourth year, and peaks again in the sixth year of the course

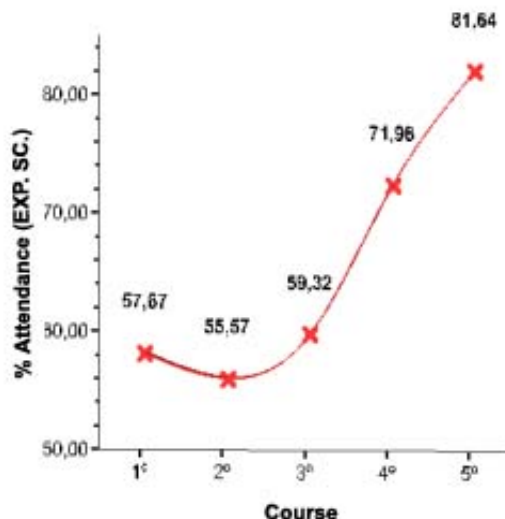
Course	Average	Standard Deviation (S.D.)	N
1º	57,07	12,07	1023
2º	56,49	12,61	933
3º	58,84	11,17	782
4º	60,62	11,81	501
5º	62,20	14,50	330
6º	68,64	8,98	61
Core	58,33	14,43	6
Optative	62,81	12,08	333
Total	59,12	12,30	4103





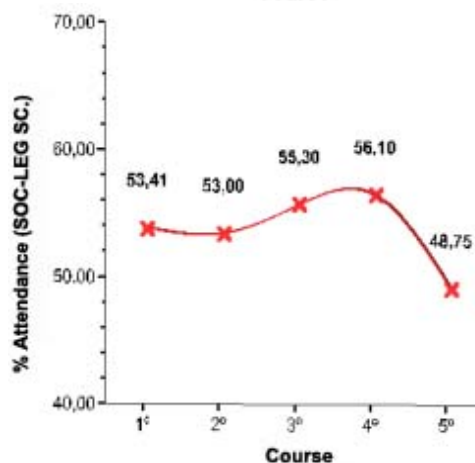
EXPERIMENTAL SCIENCES

Course	Average	S.D.	N
1°	57,67	7,23	110
2°	55,57	11,66	125
3°	59,32	7,90	93
4°	71,98	7,95	113
5°	81,64	8,28	42
Optative	63,98	9,58	26
Total	63,15	11,29	518



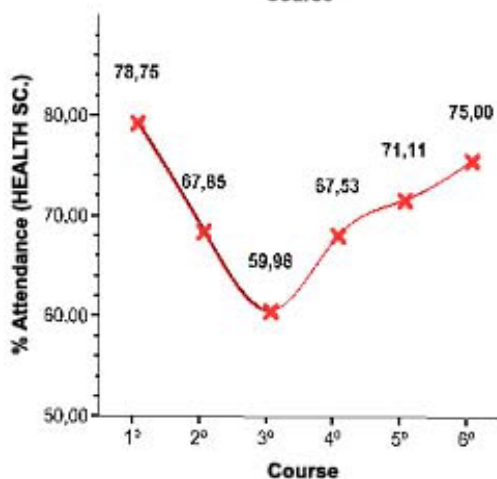
SOCIAL AND LEGAL SCIENCES

Course	Average	S.D.	N
1°	53,41	11,89	289
2°	53,00	11,28	261
3°	55,30	11,87	224
4°	56,10	10,84	124
5°	48,75	4,91	60
Optative	59,59	12,66	145
Total	55,05	11,65	1157



HEALTH SCIENCES

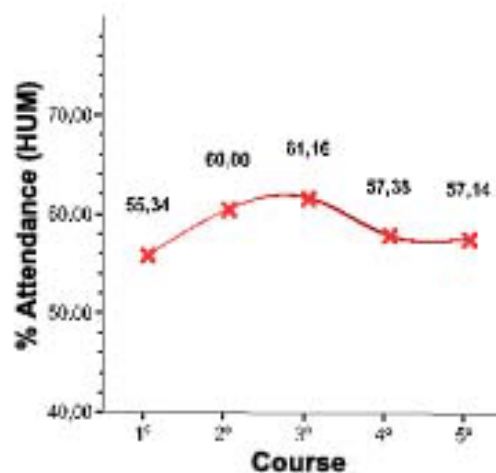
Course	Average	S.D.	N
1°	78,75	8,67	39
2°	67,85	14,89	34
3°	59,98	11,70	38
4°	67,53	14,30	25
5°	71,11	12,44	31
6°	75,00	---	2
Optative	63,75	10,50	15
Total	68,79	12,15	188





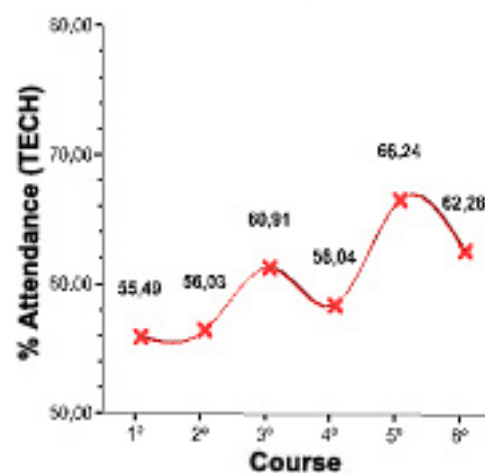
HUMANITIES

Course	Average	S.D.	N
1°	55,34	8,55	85
2°	60,00	14,83	75
3°	61,16	15,61	63
4°	57,38	8,70	86
5°	57,14	15,98	72
Core	62,50	17,67	2
Optative	59,44	10,15	85
Total	58,52	12,28	509



TECHNICAL STUDIES

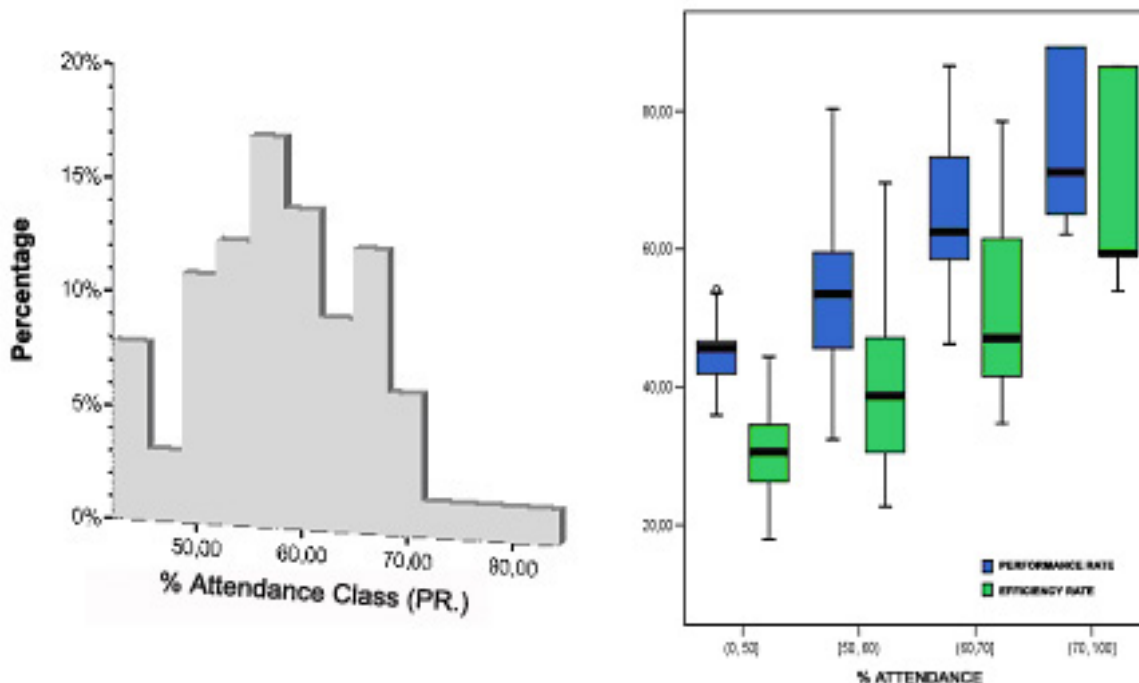
Course	Average	S.D.	N
1°	55,49	10,36	500
2°	56,03	12,09	438
3°	60,91	8,64	364
4°	58,04	14,08	153
5°	66,24	5,09	125
6°	62,28	---	59
Core	50,00	---	30
Optative	70,26	12,72	62
Total	59,34	11,55	1731





3. ATTENDANCE AND ACADEMIC PERFORMANCE

The class attendance histogram suggests that academic courses fall into one of four categories: less than 50% attendance, attendance in the 50% to 60% range, the 60% to 70% attendance band, and courses where attendance tops the 70% mark.



A comparison of Class Attendance, Performance Rates and Efficiency Rates (Biegel, S., 2000, Martins y Walker, 2005)) highlights the fact that the less well attended courses are also those in which pass rates and efficiency rates are lower, in which larger numbers of students are registered, and in which the qualifications required to get onto the course are also lower. No course with a sub-50% class attendance rate sets course entry qualification requirements. Similarly, percentages of students studying their first option are lower, whilst time taken to complete the academic year is higher as is average course duration. No clear patterns emerge for the Satisfaction, Drop Out and Graduation variables.

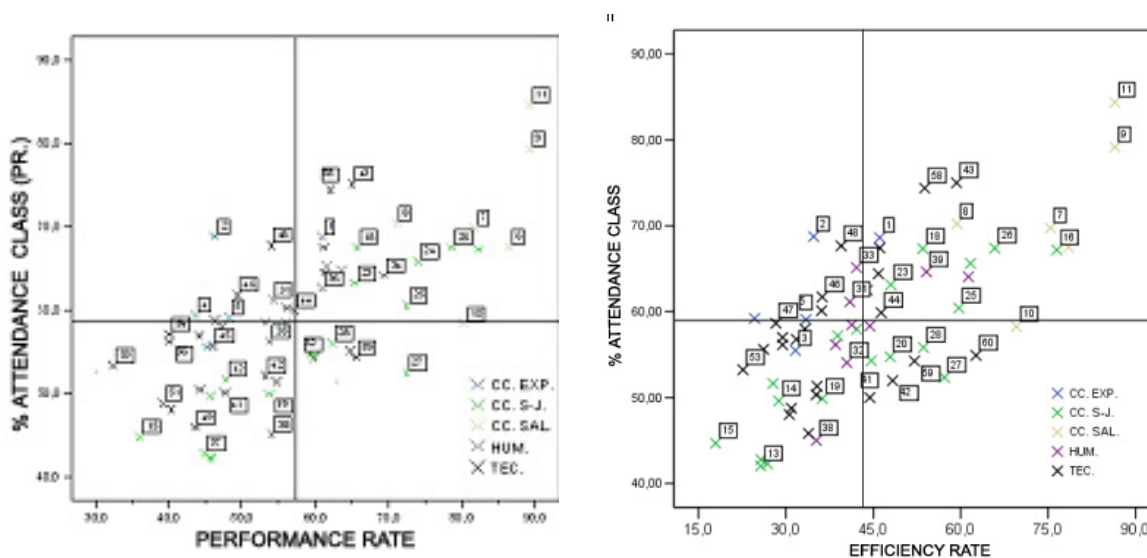
AVERAGE VALUES PER GROUP

% Attendance		STUDENTS REGISTERED	ENTRY REQUIREMENTS	FIRST OPTION PERCENT	PASS RATE
(0, 50]	Average	819	---	---	45,10
	S.D.	997,6	---	---	5,51
[50, 60)	Average	449	5,97	66,13	53,15
	S.D.	248,3	1,04	21,20	10,41
(60,70]	Average	403	6,14	73,30	65,29
	S.D.	368,9	,93	12,32	11,18
(70, 100]	Average	155	7,72	84,40	75,39
	S.D.	99,3	,62	6,98	13,12
Total	Average	475	6,3	72,04	57,30
	S.D.	506,7	1,09	16,79	13,41

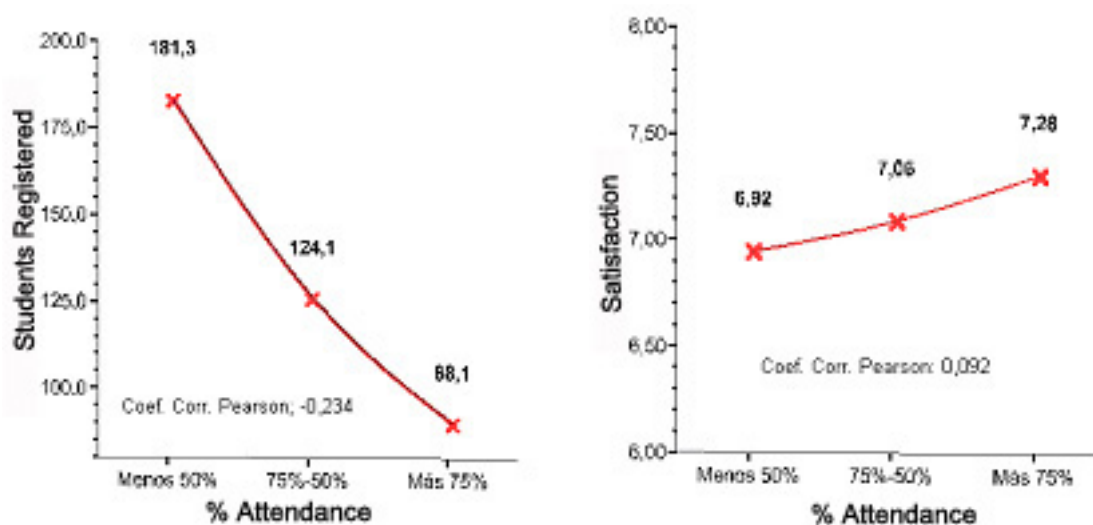


% Attendance		EFFICIENCY RATE	GRADUATION RATE	DROP OUT RATE	SATISFACTION
(0, 50]	Average	30,57	8,10	8,42	7,24
	S.D.	6,93	5,49	3,14	,36
[50, 60)	Average	39,90	10,59	10,45	6,95
	S.D.	11,77	12,37	4,45	,51
(60,70]	Average	52,32	19,94	8,56	7,15
	S.D.	13,85	20,92	3,73	,40
(70, 100]	Average	69,09	18,87	8,38	6,89
	S.D.	16,02	3,33	5,14	,64
Total	Average	44,46	13,60	9,34	7,06
	S.D.	15,87	15,28	4,11	,47

An analysis of attendance according to courses (c.f. appendix) indicates that there is a strong correlation between Class Attendance Percentages, Pass Rates and Efficiency (Pearson Correlation Coefficients of 0,678 y 0,698 respectively), and good correlations between Drop Out rates and Graduation Rates (Pearson Correlation Coefficients of -0.107 and 0.334 respectively). Another noteworthy conclusion is that Class Attendance correlates more with Efficiency than with Pass Rate, which indicates that class attendance is more related to the time needed to pass a subject, than with passing the subject *per se*.



When Class Attendance percentages are compared with student registration numbers, subjects with higher class attendance rates are those in which fewer students and registered, as well as also being those with high Satisfaction levels, although differences are small.



4. CONCLUSIONS

This University of Oviedo study on its students' class attendance and the link with key indicators or benchmarks highlights two results:

1. According to lecturer estimates, slightly over half of the students regularly attend class at our university. There is a 16% higher attendance level for Health Sciences compared to Social and Legal Studies, and attendance is 10% higher on average for later course years compared to attendance during initial years of courses. Similar results were recorded by Romer (1993), where there is also a discussion of their repercussions.
2. An explanation of the phenomenon may lie in beliefs about course quality both before entering university and upon finishing. In this respect, class attendance is consistently lower for subjects with lower Efficiency and Pass Rates (scores of 0,70 and 0,68, respectively), extended time taken to graduate, (-0,41) and lower graduation levels (0,33). It is also linked to student numbers registered for the course (-0,31) and course entry requirements (Wheat, 1998).

5. BIBLIOGRAPHY

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6. APPENDIXES

6.1. ATTENDANCE, PASS RATE AND EFFICIENCY PER QUALIFICATION.

ID	QUALIFICATION	% CLASS ATTENDANCE)	EFFICIENCY RATE
13	DIPLOMA IN BUSINESS STUDIES (OVIEDO)	42,03	25,69
17	DIPLOMA IN LABOUR RELATIONS	42,28	26,82
37	GRADUATE IN LAW	42,77	25,73
15	DIPLOMA IN PUBLIC MANAGEMENT AND ADMINISTRATION (OVIEDO)	44,68	17,93
38	GRADUATE IN PHILOSOPHY	45,00	35,23
49	MINING ENGINEER: MINES MANAGEMENT	45,83	33,89
50	MINING ENGINEER: ELECTROMECHANICAL MINING INSTALLATIONS	48,02	30,61
51	MINING ENGINEER: MINERALURGY AND METALLURGY.	48,75	30,94
14	DIPLOMA IN PUBLIC MANAGEMENT AND ADMINISTRATION (GIJÓN)	49,60	28,78
19	GRADUATE IN BUSINESS ADMINISTRATION AND MANAGEMENT	49,88	36,24
41	DIPLOMA IN NAVAL MACHINERY	50,00	44,41
52	MINING ENGINEER: MINE BORING AND PROSPECTING	50,32	35,21
64	GRADUATE IN MERCHANT NAVY STUDIES	51,32	35,35
12	DIPLOMA IN BUSINESS STUDIES (GIJÓN)	51,63	27,8
42	DIPLOMA IN MARITIME NAVIGATION	51,97	48,32
27	TEACHING: MUSIC EDUCATION	52,34	57,22
53	TECH. ENG, IN MANAGEMENT IT. (GIJÓN)	53,23	22,63
32	GRADUATE IN HISPANIC PHILOLOGY	54,06	40,47
59	COMPUTING ENGINEER	54,25	52,07
29	TEACHING: FOREIGN LANGUAGES	54,29	44,67
20	GRADUATE IN EN WORK SCIENCE	54,74	47,89
60	GEOLOGY ENGINEER	54,91	62,64
3	GRADUATE IN GEOLOGY	55,47	31,65
45	TECHNICAL ENGINEER ELECTRICITY	55,61	26,17
28	TEACHING: PRIMARY SCHOOL	55,83	53,62
56	TECHNICAL ENGINEER IN IT. SYSTEMS (OVIEDO)	56,14	29,43
35	GRADUATE IN THE HISTORY OF ART	56,15	38,53
55	TECHNICAL ENGINEER IN IT. SYSTEMS (GIJÓN)	56,78	31,8
54	TECHNICAL ENGINEER IN IT. MANAGEMENT (OVIEDO)	57,00	29,43
21	GRADUATE IN ECONOMY	57,20	38,89
22	GRADUATE IN PEDAGOGY	57,95	42,16
57	TECHNICAL ENGINEER IN TOPOGRAPHY	57,98	33,27
10	GRADUATE IN MEDICINE	58,26	69,58
40	GRADUATE IN HISTORY	58,33	44,41
30	GRADUATE IN CLASSICAL PHILOLOGY.	58,46	41,31
47	TECHNICAL ENGINEER: MECHANICS	58,65	28,3
5	GRADUATE IN CHEMISTRY	59,08	33,46
4	GRADUATE IN MATHEMATICS	59,21	24,63
44	TECHNICAL ENGINEER: FORESTRY MANAGEMENT	59,88	46,36
62	MINING ENGINEER	60,11	36,13



25	TEACHING: PHYSICAL EDUCATION	60,41	59,69
31	GRADUATE EN FRENCH PHILOLOGY	61,14	40,97
46	TECHNICAL ENGINEER INDUSTRIAL ELECTRONICS	61,70	36,24
36	GRADUATE IN MUSIC HISTORY AND SCIENCE	62,50	43,99
23	GRADUATE IN PSYCHOLOGY	63,14	48,01
34	GRADUATE IN ROMANCE PHILOLOGY	64,06	61,33
63	INDUSTRIAL ENGINEER	64,42	45,88
39	GRADUATE IN GEOGRAPHY	64,63	54,13
ID	QUALIFICATION	% CLASS ATTENDANCE	EFFICIENCY RATE
33	GRADUATE IN ENGLISH PHILOLOGY	65,13	42,13
24	TEACHING: SPECIAL EDUCATION	65,62	61,69
16	DIPLOMA IN SPEECH THERAPY	67,18	76,5
18	DIPLOMA IN TOURISM	67,34	53,5
26	TEACHING: PRE-SCHOOL	67,39	65,86
61	CHEMICAL ENGINEER	67,41	46,12
6	DIPLOMA IN NURSING	67,50	78,51
48	TECHNICAL ENGINEER: INDUSTRIAL CHEMISTRY	67,66	39,49
1	GRADUATE IN BIOLOGY	68,61	46,1
2	GRADUATE IN PHYSICS	68,75	34,76
7	DIPLOMA IN PHYSIOTHERAPY	69,73	75,42
8	GRADUATE IN BIOCHEMISTRY	70,23	59,37
58	TELECOMMUNICATIONS ENGINEER	74,38	53,83
43	TECHNICAL ENGINEER TELECOMMUNICATIONS; TELEMATICS	75,00	59,31
9	GRADUATE IN ODONTOLOGY (2º LEVEL)	79,16	86,47
11	GRADUATE IN ODONTOLOGY	84,37	86,47



6.2. DEFINITIONS OF INDICATORS USED

- **Pass rate or Performance Rate** : The mathematical relationship between the number of students who have passed the subject and the total number of registered students.
- **Efficiency Rate**: The mathematical relationship between the credits that students have earned and the number of credits they had to register for in order to earn that particular number of credits.
- **Drop Out Rate**: The percentage of students who have not registered for a course of study for two consecutive years, but have not finished at the university, not requested a course change leading to the same or similar qualification.
- **Graduation Rate**: The percentage of students who graduated from the course, without altering subjects studied, in relation to the number of students registered for the first year of that course n years before, where n is the duration of the course in years according to the university prospectus.