Universidade do Porto no University Ranking by Academic Performance URAP - World Ranking 2014-2015

http://www.urapcenter.org/2014/

I.   Metodologia do URAP – World Ranking 2014-2015 e participação da U.Porto

"University Ranking by Academic Performance (URAP) Research Laboratory was established at Informatics Institute of Middle East Technical University in 2009. Main objective of URAP is to develop a ranking system for the world universities based on academic performances which determined by quality and quantity of scholarly publications. In line with this objective yearly World Ranking of 2000 Higher Education Institutions have been released since 2010." [1]

"**Aim and Scope**

The URAP ranking system's focus is on academic quality. URAP has gathered data about 2,500 Higher Education Institutes (HEI) in an effort to rank these organizations by their academic performance. The overall score of each HEI is based upon its performance over several indicators which are described in the Ranking Indicators section. The ranking includes HEIs except for governmental academic institutions, e.g. the Chinese Academy of Science and the Russian Academy of Science, etc. Data for 2,500 HEIs have been processed and top 2,000 of them are scored. Thus, *URAP covers approximately 10% of all HEIs in the world*, which makes it one of the most comprehensive university ranking systems in the world.

URAP ranking system is completely based on objective data obtained from reliable open sources. The system ranks the universities according to multiple criteria. Most of the currently available ranking systems are both size and subject dependent. The URAP research team is currently working on a new methodology which will minimize the impact of size and subject dependency.

The goal of the URAP ranking system is not to label world universities as best or worst. Our intention is to help universities identify potential areas of progress with respect to specific academic performance indicators. Similar to other ranking systems, the URAP system is neither exhaustive nor definitive, and is open to new ideas and improvements. The current ranking system will be continuously upgraded based on our ongoing research and the constructive feedback of our colleagues." [2]

"**World Ranking Indicators**

URAP 2014-2015 World Ranking is based on 6 academic performance indicators. Since URAP is an academic performance based ranking, publications constitute the basis of the ranking methodology. Both quality and quantity of publications and international research collaboration performance are used as indicators. The indicators, the data sources, and the duration of coverage are summarized in the table below.

Indicator	Objective	Coverage	Source
Article	Current Scientific Productivity	2013	InCites
Citation	Research Impact	2011-2013	InCites
Total Document	Scientific Productivity	2011-2013	Web of Science
Article Impact Total	Research Quality	2011-2013	InCites
Citation Impact Total	Research Quality	2011-2013	InCites
International Collaboration	International Acceptance	2011-2013	InCites

A detailed description of each indicator is provided below:

Article: is a measure of current scientific productivity which includes articles published in 2013 and indexed by Web of Science and listed by Incites. Article number covers articles, reviews and notes. The weight of this indicator on the overall ranking is %21.

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[1] http://www.urapcenter.org/2014/ Acedido 12 novembro de 2014.

[2] http://www.urapcenter.org/2014/methodology.php?q=2 Acedido 12 novembro de 2014.

Citation: is a measure of research impact and scored according to the total number of citations received in 2011-2013 for the articles published in 2011-2013 and indexed by Web of Science. The effect of citation on the overall ranking is %21.

Total Document: :is the measure of sustainability and continuity of scientific productivity and presented by the total document count which covers all scholarly literature including conference papers, reviews, letters, discussions, scripts in addition to journal articles published during 2011-2013 period. The weight of this indicator is %10.

Article Impact Total (AIT): is a measure of scientific productivity corrected by the institution's normalized CPP [citation per publication] with respect to the world CPP in 23 subject areas between 2011 and 2013. The ratio of the institution's CPP and the world CPP indicates whether the institution is performing above or below the world average in that field. This ratio is multiplied by the number of publications in that field and then summed across the 23 fields, which is summarized in the following formula:

$$AIT = \sum_{i=1}^{23} \left(\frac{CPP_i}{CPP_{world}} \right) * Articles_i$$

This indicator aims to balance the institution's scientific productivity with the field normalized impact generated by those publications in each field. The weight of this indicator is %18.

Citation Impact Total (CIT): is a measure of research impact corrected by the institution's normalized CPP with respect to the world CPP in 23 subject areas between 2011 and 2013. The ratio of the institution's CPP and the world CPP indicates whether the institution is performing above or below the world average in that field. This ratio is multiplied by the number of citations in that field and then summed across the 23 fields. This indicator aims to balance the institution's scientific impact with the field normalized impact generated by the publications in each field, which is summarized in the following formula:

$$CIT = \sum_{i=1}^{23} \left(\frac{CPP_i}{CPP_{world}} \right) * Citations_i$$

The contribution of this indicator to the overall ranking is %15.

International Collaboration: is a measure of global acceptance of a university. International collaboration data, which is based on the total number of publications made in collaboration with foreign universities, is obtained from InCites for the years 2011-2013. The weight of this indicator is %15 in the overall ranking. For the 2014 URAP World Ranking, bibliometric data is obtained through Thomson Reuters' InCites research analytics service, which provides an interface to the Web of Science database. The 23 subject areas used in the ranking are based on the discipline classification matrix developed by the Australian Research Council for journals indexed in Web of Science. "[3]

"Data Collection & Scoring

Data is gathered from Web of Science and other sources which provide lists of HEIs. 2500 HEIs with highest number of publications were initially considered, and 2000 of them were ranked after data processing. Reliability of ranking depends mostly on the quality of the data used. In order to provide reliable data, pre-processing and data cleaning techniques were employed.

 Statistical analysis indicated that the raw bibliometric data underlying our indicators had highly skewed distributions. Therefore, the indicator values above and below the median are linearly scored in two groups. The Delphi system was conducted with a group of experts to assign weighting scores to the indicators. Total score of 600 is distributed to each indicator as follows:

Article: % 21

Total Document: % 10

Citation: %21

Article Impact Total: %18

Citation Impact Total: %15

International Collaboration: %15"[4]

O Informatics Institute da Middle East Technical University não solicita informações às Universidades.

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[3] http://www.urapcenter.org/2014/methodology.php?q=3 Acedido 12 novembro 2014.

[4] http://www.urapcenter.org/2014/methodology.php?q=4 Acedido 12 novembro 2014.

II.   Posição das Universidades portuguesas no URAP – World Ranking

Universidade do Porto: Evolução[5]

	2010	2011	2012	2013	2014
Ranking Mundial	259 Score: 325. 89	229 Score: 327. 95	218 Score: 328. 22	219 Score: 348.32	189 Score: 355.36
Ranking Europeu	109	94	93	94	84
Ranking Iberoamericano	10	8	8	8	6
Ranking Nacional	1	1	1	1	2

Universidades portuguesas no URAP – World Ranking 2014-2015

	World Ranking	Europe Ranking	Iberoamerica Ranking	Portugal Ranking
Universidade de Lisboa	125	52	4	1
Universidade do Porto	189	84	6	2
Universidade de Coimbra	304	133	15	3
Universidade de Aveiro	400	178	27	4
Universidade do Minho	427	183	30	5
Universidade Nova de Lisboa	429	185	31	6
Universidade do Algarve	897	382	77	7
Universidade de Trás-os-Montes e Alto Douro	1041	428	88	8
Universidade de Évora	1091	448	92	9
Universidade da Beira Interior	1207	483	104	10
Instituto Politécnico de Lisboa	1512	579	127	11
Universidade Católica Portuguesa	1571	600	133	12
ISCTE Instituto Universitário de Lisboa	1713	642	141	13
Instituto Politécnico do Porto	1841	682	150	14
Instituto Superior Psicologia Aplicada (ISPA)	1944	709	158	15

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[5] Dados de 2010 a 2013 retirados de "Evolução das posições da Universidade do Porto nos rankings universitários", janeiro de 2014, *in*
https://sigarra.up.pt/up/pt/conteudos_service.conteudos_cont?pct_id=20113&pv_cod=55GoHdmanvIq

Scores das Universidades portuguesas no URAP – World Ranking 2014-2015

World Rank	University	Article	Citation	Total Document	AIT	CIT	Collaboration	Total
125	Universidade de Lisboa	87.58	74.25	39.50	65.08	49.40	59.86	375.66
189	Universidade do Porto	81.87	70.98	37.63	61.82	47.94	55.12	355.36
304	Universidade de Coimbra	72.51	68.17	33.99	58.39	47.51	50.53	331.10
400	Universidade de Aveiro	70.54	65.73	32.67	57.33	45.96	49.29	321.51
427	Universidade do Minho	68.46	66.02	32.25	56.83	46.70	48.59	318.86
429	Universidade Nova de Lisboa	69.07	65.76	32.27	56.84	46.15	48.61	318.70
897	Universidade do Algarve	62.70	62.42	29.73	53.69	44.57	45.65	298.76
1041	Universidade de Trás-os-Montes e Alto Douro	62.58	55.68	29.07	50.27	32.43	45.08	275.10
1091	Universidade de Évora	47.69	54.03	21.07	50.16	44.56	44.82	262.33
1207	Universidade da Beira Interior	50.04	44.50	23.72	43.43	31.87	32.53	226.09
1512	Instituto Politécnico de Lisboa	13.04	30.33	9.37	29.23	32.60	17.57	132.14
1571	Universidade Católica Portuguesa	16.18	28.13	10.41	25.13	22.30	18.41	120.56
1713	ISCTE Instituto Universitário de Lisboa	19.11	12.95	9.89	13.68	7.67	25.12	88.41
1841	Instituto Politécnico do Porto	14.22	10.46	5.55	11.92	11.19	9.32	62.66
1944	Instituto Superior Psicologia Aplicada (ISPA)	1.89	8.62	3.87	9.66	7.96	14.35	46.35

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12 de novembro de 2014

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