



Rediscovery of Older Information:

Elsevier Backfile Collections

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Outline

- Overview of Licensing Environment – Texas A&M University System
- Content overlap of Elsevier's Current and Backfile Collections
- Use analysis of Elsevier's Backfile Collections



Texas A&M System

- Texas A&M University, College Station
 - Agencies (TAES, TEEX, TTI, etc.)
 - Texas A&M University - Galveston
 - Texas A&M University - Qatar
- Health Sciences Center
 - Baylor School of Dentistry (Dallas)
 - College of Medicine
 - Graduate School of Biomedical Sciences
 - Institute of Biosciences and Technology
 - School of Rural Public Health



Texas A&M System

■ Other System Campuses

- Prairie View A&M University (Enrollment FTE: 7,808)
- Tarleton State University (Enrollment FTE: 8,309)
- Texas A&M International University (Enrollment FTE: 2,832)
- Texas A&M University – Commerce (Enrollment FTE: 5,271)
- Texas A&M University – Corpus Christi (Enrollment FTE: 5,980)
- Texas A&M University – Kingsville (Enrollment FTE: 5,204)
- Texas A&M University – Texarkana (Enrollment FTE: 1,052)
- West Texas State University (Enrollment FTE: 5,261)



Elsevier's Subject Collections

- Book Series Collections
 - 5 collections, 142 titles
- Current Journals Collections
 - 24 collections, 1,592 titles
- Journal Backfile Collections
 - 23 collections, 1,362 titles

Number of Total and of Unique Titles in the Elsevier Book Series Collections

	Total Number of Titles	Number of Unique Titles	Unique Titles as Percent of Collection
Business, Management & Economics	55	44	80.0%
Chemistry	13	13	100.0%
Life Sciences	33	33	100.0%
Psychology	22	0	0.0%
Social Sciences	41	30	73.2%
TOTAL:	164		

Number of Total and of Unique Titles in the Elsevier Current Journal Collections

	Total Number of Titles	Number of Unique Titles	Unique Titles as Percent of Collection
Agricultural & Biological Sciences	145	34	23.4%
Arts & Humanities	39	4	10.3%
Biochemistry, Genetics & Molecular Biology	215	63	29.3%
Business, Management & Accounting	76	15	19.7%
Chemical Engineering	71	14	19.7%
Chemistry	93	9	9.7%
Computer Science	115	23	20.0%
Decision Sciences	46	0	0.0%
Earth & Planetary Sciences	90	50	55.6%
Economics, Econometrics & Finance	77	45	58.4%
Energy & Power	41	6	14.6%
Engineering & Technology	177	42	23.7%
Environmental Science	77	9	11.7%
Immunology & Microbiology	84	3	3.6%
Materials Science	109	35	32.1%
Mathematics	88	37	42.0%
Medicine & Dentistry	504	266	52.8%
Neuroscience	107	19	17.8%
Nursing	63	14	22.2%
Pharmacology, Toxicology & Pharmaceutics	79	27	34.2%
Physics and Astronomy	96	27	28.1%
Psychology	104	13	12.5%
Social Science	154	28	18.2%
Veterinary	34	6	17.6%
Total Number of Titles: 1,592			



Elsevier Backfile Collections

- Elsevier made a commitment several years ago to digitize its entire journal backfile content.
- Elsevier has marketed this content in the form of Backfile Collections on the ScienceDirect platform.
- These Collections provide content coverage back to v.1 n.1 for all titles.



Elsevier Backfile Collections

- In mid-2004, Elsevier released the last of 23 subject Backfile Collections, and has released 4 title Backfile Collections.
- By mid-2005, Elsevier released 17 Collection Supplements, augmenting all but 6 of the original Collections. Additional Supplements are forthcoming.



Texas A&M System Purchases

- Texas A&M University System has purchased all 23 of the subject Backfile Collections as well as 3 of the title Backfile Collections.
- As part of our review process for our most recent purchases, I measured the content overlap between and among the subject Backfile Collections.



Calculating “subscription years”

- All title lists and years published were taken from the ScienceDirect website and entered into a spreadsheet
- Each title’s “subscription years” is the number of years the title was published (regardless of frequency)
- Each Collection’s total “subscription years” is the cumulated total of years published for all titles in the Collection
- Overlap of “subscription years” between one Collection and others is expressed as a percentage of that Collection’s total “subscription years”



Licensing and Access

Content

Implementing SD

Using SD

News and Updates

Selected Links

Licensing and Access

- Primary Licensing Options
- Individual Article Purchase Options
- Pay per View
- Guest Access

Content

- Journal Lists
- New Journals/Title Changes
- Elsevier Books on ScienceDirect
- Backfiles

Implementing SD

- Usage Reports

Using SD

- Interactive Tutorials
- Personalization/Setting Up Alerts
- Search Tips
- Information for Authors
- Information About Athens Login

Latest News

- July 2005 Release Notes
- SD Connect Newsletter

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	A	B	C	D	E	F	G	H	I
2	<i>Blue shaded entries are title additions</i>								
3									
4	ISSN	Title	Year Range						
5	0001706X	Acta Tropica	1989-1994						
6	0309586X	Agricultural Administration (<i>continued as</i> Agricultural Administration and Extension)	1974-1986						
7	02697475	Agricultural Administration and Extension (<i>continued from</i> Agricultural Administration)	1987-1988						
8	00021571	Agricultural Meteorology (<i>continued as</i> Agricultural and Forest Meteorology)	1964-1983						
9	01681923	Agricultural and Forest Meteorology (<i>continued from</i> Agricultural Meteorology)	1984-1994						
10	01695150	Agricultural Economics	1986-1994						
11	0308521X	Agricultural Systems	1976-1994						
12	03783774	Agricultural Water Management	1976-1994						
13	03041131	Agriculture and Environment (<i>merged into</i> Agriculture, Ecosystems & Environment)	1974-1982						
14	03043746	Agro-Ecosystems (<i>merged into</i> Agriculture, Ecosystems & Environment)	1974-1982						
15	01678809	Agriculture, Ecosystems & Environment (<i>continued from</i> Agriculture and Environment and Agro-Ecosystems)	1983-1994						
16	00033472	Animal Behaviour	1958-1994						
17	03778401	Animal Feed Science and Technology	1976-1994						
18	03784320	Animal Reproduction Science	1978-1994						
19	09598030	Annual Review of Fish Diseases	1991-1994						
20	07381751	Antimicrobial Newsletter (<i>merged into</i> Antimicrobics and Infectious Diseases Newsletter)	1984-1993						
21	02782316	Infectious Diseases Newsletter (<i>merged into</i> Antimicrobics and Infectious Diseases Newsletter)	1981-1994						
22	1069417X	Antimicrobics and Infectious Diseases Newsletter (<i>continued from</i> Antimicrobial Newsletter and Infectious Diseases Newsletter)	1994						
23	03043762	Applied Animal Ethology (<i>continued as</i> Applied Animal Behaviour Science)	1974-1984						
24	01681591	Applied Animal Behaviour Science (<i>continued from</i> Applied Animal Ethology)	1984-1994						
25	09291393	Applied Soil Ecology	1994						
26	01448609	Aquacultural Engineering	1982-1994						
27	00448486	Aquaculture	1972-1994						
28	03043770	Aquatic Botany	1975-1994						
29	0166445X	Aquatic Toxicology	1981-1994						
30	00207322	International Journal of Insect Morphology and Embryology	1971-1994						
31	03051978	Biochemical Systematics and Ecology	1973-1994						
32	03766357	Behavioural Processes	1976-1994						
33	00062207	Biological Conservation	1969-1994						

1	Backfiles										Back																			
2	Title	ISSN	Beginning Year	Ending Year	Subscription Years	Agricultural & Biological Sciences	Biochemistry, Genetics & Molecular Biology	Business, Management & Accounting	Chemistry	Computer Science	Decision Sciences	Earth & Planetary Sciences	Economics, Econometrics & Finance	Energy & Power	Engineering & Technology	Environmental Science	General Physics	High Energy/Nuclear Physics & Astronomy	Immunology & Microbiology	Materials Science	Mathematics	Medicine & Dentistry	Neuroscience	Nursing	Pharmacology, Toxicology & Pharmaceuticals	Psychology	Social Science	Veterinary	Agricultural & Biological Sciences	Biochemistry, Genetics & Molecular Biology
3	Academic Radiology	'10766332			1																									
4	ACC current journal review	'10621458			1																									
5	Accident analysis and prevention	'00014575	1969	1994	26																	X								
6	Accident and emergency nursing	'09652302	1993	1994	2																	X								
7	Accounting Forum	'01559982			1																		X							
8	Accounting, management, and information technologies	'09598022	1991	1994	4																									
9	Accounting, organizations and society	'03613682	1976	1994	19																									
10	Acta astronautica	'00945765	1974	1994	21										X															
11	Acta Biomaterialia	'17427061			1																									
12	Acta Histochemica	'00651281			1																									
13	Acta materialia	'13596454			1																									
14	Acta metallurgica	'00016160	1953	1989	37																									
15	Acta metallurgica et materialia	'09567151	1990	1994	5																									
16	Acta Decologica	'1146609X			1																									
17	Acta psychologica	'00016918	1936	1994	59																									
18	Acta tropica	'0001706X	1989	1994	6	X																								
19	Acute Pain	'13660071			1																									
20	Ad Hoc Networks	'15708705			1																									
21	Addictive behaviors	'03064603	1976	1994	19																									
22	Additives for polymers	'03063747	1987	1994	8																									
23	Advanced cement based materials	'10657355	1994	1994	1									X																
24	Advanced drug delivery reviews	'0169409X	1987	1994	8																									
25	Advanced energy conversion	'03651789	1961	1968	8									X																
26	Advanced Engineering Informatics	'14740346			1																									
27	Advances in applied mathematics	'01968858	1980	1994	15																									

	C	D	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BI	BJ	BK																	
1						Backfiles																																													Bac
2	Title	ISSN	Beginning Year	Ending Year	Subscription Years	Agricultural & Biological Sciences	Biochemistry, Genetics & Molecular Biology	Business, Management & Accounting	Chemistry	Computer Science	Decision Sciences	Earth & Planetary Sciences	Economics, Econometrics & Finance	Energy & Power	Engineering & Technology	Environmental Science	General Physics	High Energy/Nuclear Physics & Astronomy	Immunology & Microbiology	Materials Science	Mathematics	Medicine & Dentistry	Neuroscience	Nursing	Pharmacology, Toxicology & Pharmaceutics	Psychology	Social Science	Veterinary							Agricultural & Biological Sciences	Biochemistry, Genetics & Molecular Biology															
2401	Research in Social Movements, Conflicts and Change	0163786X			1																																														
2402	Research in Social Problems and Public Policy	01961152			1																																														
2403	Research in Social Science and Disability	14793547			1																																														
2404	Research in Social Stratification and Mobility	02765624			1																																														
2405	Research in the History of Economic Thought and Methodology	07434154			1																																														
2406	Research in the Sociology of Education	14793539			1																																														
2407	Research in the Sociology of Health Care	02754959			1																																														
2408	Research in the Sociology of Organizations	0733558X			1																																														
2409	Research in the Sociology of Work	02772833			1																																														
2410	Research in Transportation Economics	07398859			1																																														
2411	Research in Urban Policy	14793520			1																																														
2412	Research in Urban Sociology	10470042			1																																														
2413	Research methodology in strategy and management	14798387			1																																														
2414	Research on Economic Inequality	10492585			1																																														
2415	Research on Managing Groups and Teams	15340856			1																																														
2416	Research on Technological Innovation, Management and Policy	07371071			1																																														
2417	Sociological Studies of Children and Youth	15374661			1																																														
2418	Studies in Educational Ethnography	1529210X			1																																														
2419	Studies in Law, Politics and Society	10594337			1																																														
2420	Studies in Qualitative Methodology	10423192			1																																														
2421	Studies in Symbolic Interaction	01632396			1																																														
2422	Syntax and Semantics	00924563			1																																														
2423	Vitamins & Hormones	00836729			1																																														
2424																																																			
2425																																																			

Content Overlap of Each Elsevier Subject Backfile Collection With Each Other Collection

	Agricultural & Biological Sciences	Biochemistry, Genetics & Molecular Biology	Business Management & Accounting	Chemistry	Computer Science	Decision Sciences	Earth & Planetary Sciences	Economics, Econometrics & Finance	Energy & Power	Engineering & Technology	Environmental Science	General Physics	High Energy/Nuclear Physics & Astronomy	Immunology & Microbiology	Materials Science	Mathematics	Medicine & Dentistry	Neuroscience	Nursing	Pharmacology, Toxicology & Pharmaceuticals	Psychology	Social Science	Veterinary
Agricultural & Biological Sciences		10.1	0	2.7	0.6	0	13.8	5.8	2.3	2.1	27.1	0	0	11.4	0.6	1.6	5.4	1.1	0	5.2	1.1	5.3	11.0
Biochemistry, Genetics & Molecular Biology	8.4		0	7.6	0	0	1.2	0	0	2.2	1.2	0	10.8	0	0	13.3	6.2	0	0	5.7	1.2	0	0.5
Business Management & Accounting	0	0		0	5.5	16.6	0	16.7	1.7	8.2	3.6	0	0	0	0	0	0	0	0	0	5.3	19.3	0
Chemistry	2.7	10.7	0		2.1	0	1.0	0	2.7	0.5	1.1	2.8	0	1.6	8.9	0	0.1	0	0	4.7	0	0	0
Computer Science	0.6	0	2.5	2.3		11.2	1.2	0	0	23.6	0	1.8	0	0.3	14.4	5.8	1.3	0	0	0	2.8	5.3	0
Decision Sciences	0	0	2.15	0	29.1		0	9.4	0	15.9	0	0	0	0	14.4	0	0	0	0	0	0	21.8	0
Earth & Planetary Sciences	13.8	1.4	0	1.0	1.1	0		0	5.5	6.9	23.4	0	8.6	1.4	0.6	0	0	0	0	0	0	1.0	0
Economics, Econometrics & Finance	12.0	0	13.3	0	0	6.0	0		6.8	1.6	2.9	0	0	0	8.2	1.5	0	0	0	0	1.6	16.4	0
Energy & Power	3.7	0	1.3	5.4	0	0	11.2	6.6		38.5	12.8	1.7	9.0	0	9.0	0	0	0	0	0	0	2.4	0
Engineering & Technology	1.5	0	2.4	0.4	19.3	3.4	5.0	0.6	13.8		1.6	8.1	3.3	0	15.3	10.2	1.0	0	0	0	0	1.8	0
Environmental Science	48.3	4.3	2.3	1.9	0	0	37.6	2.2	7.3	3.6		0	0	3.3	0	0	0	0	0	1.2	0	11.2	0
General Physics	0	0	0	4.4	3.7	0	0	0	1.3	17.8	0		3.6	0	30.1	5.7	0	0	0	0	0	0	0
High Energy/Nuclear Physics & Astronomy	0	0	0	0	0	26.3	0	13.5	13.6	0	6.9	0		0	0	0	2.7	0	0	0	0	0	0
Immunology & Microbiology	22.4	25.6	0	3.1	0	0	2.8	0	0	0	4.0	0	0		0	0	42.8	2.4	0	0	0	0	5.2
Materials Science	0.9	0	0	10.0	0.9	0	0.6	0	5.1	24.0	0	26.5	2.3	0		0	0	0	0	0	0	0	0
Mathematics	2.2	0	0	0	18.6	6.4	0	5.7	0	20.3	0	3.2	2.9	0	0		0	0	0	0	2.2	2.9	0
Medicine & Dentistry	2.0	6.0	0	0.1	2.0	0	0	0.3	0	0.5	0	0	0.3	0.5	0.1	0		8.9	1.8	0.7	7.4	2.9	1.9
Neuroscience	1.6	11.2	0	0	2.1	0	0	0	0	0	0	0	0	1.8	0	0	35.9		0	11.5	22.1	0	0
Nursing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77.0	0	0	0	0	0	0
Pharmacology, Toxicology & Pharmaceuticals	11.5	15.3	0	10.3	0	0	0	0	0	0	1.8	0	0	11.3	0	0	4.1	17.3	0	0	0	0	1.6
Psychology	1.7	2.3	3.4	0	4.0	0	0	1.3	0	0	0	0	0	0	0	2.5	32.1	23.8	0	0	0	18.2	0
Social Science	5.3	0	5.9	0	5.8	7.4	1.1	8.7	1.3	2.7	7.7	0	0	0	0	2.2	8.5	0	0	0	11.9	0	0
Veterinary	68.8	3.8	0	0	0	0	0	0	0	0	0	0	0	29.2	0	0	31.3	0	0	4.5	0	0	0

Key: Overlap < 10% (Yellow) Overlap 10% - 25% (Light Green) Overlap 25% - 50% (Orange) Overlap > 50% (Pink)

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Percent of All Collections' Unique Content by Individual Collection, in Rank Order

	Total Subscription Years	Unique Subscription Years	Unique Content	Total Number of Titles	Number of Unique Titles	Percent of all Collections' Unique Content
ALL COLLECTIONS	19,823	13,492	68.1	1,362	950	
Veterinary	288	16	5.6	19	2	0.2%
Decision Sciences	555	75	13.5	40	4	0.4%
Nursing	113	26	23.0	16	8	0.8%
Psychology	1,112	290	25.2	66	15	1.6%
Immunology & Microbiology	915	126	13.8	69	17	1.8%
High Energy/Nuclear Physics & Astronomy	594	300	50.5	33	18	1.9%
Energy & Power	889	300	33.7	61	20	2.1%
Environmental Science	1,126	185	16.4	87	20	2.1%
Neuroscience	1,200	343	28.6	80	25	2.6%
Mathematics	1,252	532	42.5	63	28	2.9%
Pharmacology, Toxicology & Pharmaceuticals	800	389	48.6	56	29	3.1%
Agricultural & Biological Sciences	1,801	546	30.3	118	32	3.4%
Business, Management & Accounting	723	309	42.7	65	32	3.4%
Economics, Econometrics & Finance	868	369	42.5	71	36	3.8%
Computer Science	1,619	447	27.6	130	38	4.0%
General Physics	1,131	559	49.4	70	39	4.1%
Earth & Planetary Sciences	1,804	803	50.7	98	48	5.1%
Materials Science	1,583	1,139	45.8	108	52	5.5%
Engineering & Technology	2,487	798	31.7	165	61	6.4%
Chemistry	1,773	1,197	67.5	104	66	6.9%
Social Science	1,632	942	57.7	132	67	7.1%
Biochemistry, Genetics & Molecular Biology	2,157	880	40.8	139	77	8.1%
Medicine & Dentistry	4,818	3,021	62.7	349	218	22.9%

Content Overlap of Each Elsevier Subject Backfile Collection With All Other Collections, in Rank Order

	Total Subscription Years	Unique Subscription Years	Unique Content	Total Number of Titles	Number of Unique Titles	Overlap With All Other Collections
ALL COLLECTIONS	19,823	13,492	68.1	1,362	960	
Chemistry	1,773	1,197	67.5	104	66	32.5%
Medicine & Dentistry	4,818	3,021	62.7	349	218	37.3%
Social Science	1,632	942	57.7	132	67	42.3%
Earth & Planetary Sciences	1,804	301	50.7	99	48	49.3%
High Energy/Nuclear Physics & Astronomy	594	300	50.5	33	18	49.5%
General Physics	1,131	559	49.4	70	39	50.6%
Pharmacology, Toxicology & Pharmaceuticals	800	389	48.6	56	29	51.4%
Materials Science	1,583	331	45.8	109	52	54.5%
Business, Management & Accounting	723	309	42.7	65	32	57.3%
Economics, Econometrics & Finance	868	369	42.5	71	36	57.5%
Mathematics	1,252	532	42.5	63	28	57.5%
Biochemistry, Genetics & Molecular Biology	2,157	880	40.8	139	77	59.2%
Energy & Power	899	300	33.7	61	20	66.3%
Engineering & Technology	2,487	788	31.7	165	61	68.3%
Agricultural & Biological Sciences	1,801	546	30.3	118	32	69.7%
Neuroscience	1,200	343	28.6	80	25	71.4%
Computer Science	1,619	447	27.6	130	38	72.4%
Psychology	1,112	280	25.2	66	15	74.2%
Nursing	113	26	23.0	16	8	77.0%
Environmental Science	1,126	185	16.4	87	20	83.6%
Immunology & Microbiology	915	126	13.8	69	17	86.2%
Decision Sciences	556	75	13.5	40	4	86.5%
Veterinary	288	16	5.6	19	2	94.4%

Number of Titles in Multiple Collections

In Number of Collections	Number of Titles	Subscription Years	Percent of Total Content
5	1	26	0.1%
4	5	118	0.5%
3	95	1,389	6.4%
2	444	6,597	30.5%
1	949	13,486	62.4%
TOTAL	1,494	21,616	



New findings

- Titles have dropped out of original collections
- Some titles in original collections now part of another collection's supplement
- Inaccuracies in start and ending dates
- Missing content
- Medicine's supplement has no overlap

Measuring Overlap With Owned Collections



- If you are considering the purchase of a Collection, you will first want to know the overlap of that Collection with Collections you already own.
 - Sort the Collection's titles against holdings in owned Collections
 - Calculate overlap as the percentage of this Collection's total "subscription years" for titles that are also part of owned Collections
 - Example: The Veterinary Medicine Collection has a 68.8% overlap of its content with the Agricultural Sciences Collection



Measuring Overlap With Other Unowned Collections

- You will then want to know the overlap of the unowned Collections that you are considering for purchase with one another, without counting overlap more than once.
 - Place the Collections your are considering in alphabetical order
 - By definition, the first Collection has no overlap
 - Measure the overlap of the second collection with the first
 - Measure the overlap of the third collection with the first and the second, etc.



Use Analysis: All 23 Backfile Collections

- 18,334 “subscription years”
- 301,778 article downloads since 2002
- \$1.55 cost per use
- 16.5 downloads per “subscription year”
- In the first 6 months of 2006, the Backfile Collections constituted 15.4% of total journal use on ScienceDirect



Use Analysis: Chemistry Backfile Collection

- 1,773 “subscription years”
(9.7% of all “subscription years”)
- 73,610 article downloads since 2002
(24.4% of all downloads)
- \$1.21 cost per use
- 41.5 downloads per “subscription year”



- In the first 6 months of 2006, the Chemistry Backfile Collection constituted 13.3% of total use of chemistry journals on ScienceDirect



Questions?