

## Exhibit 45-3: Journal Category Hierarchies

### Clarification of vocabularies:

Major providers and users of bibliometric data use a hierarchical structure to classify journals

### PROVIDERS OF BIBLIOMETRIC DATA:

#### Clarivate Analytics:

- Three overarching categories for use in Web of Science citation indexes: Arts & Humanities, Social Sciences, and Science. JCR uses Social Science and Science.
- Research areas –Five broad areas, Arts & Humanities, Life Sciences & Biomedicine, Engineering & Technology, Physical Sciences and Technology
- Essential Science Indicators uses 22 “Research Fields”
- Categories- Specific categories expanding the Research fields; used in JCR to compare journals with their peers and in [WOS](#).

#### Elsevier Scopus and CiteScore

- **Four subjects:** Social Sciences & Humanities and Life, Physical, and Health sciences.
- **Subject areas:** 27 areas used in [CiteScore](#) and expanded into
- **Fields** – in its [expanded list](#) with codes to go along with the terminology.

[SJR](#) (Scimago Journal Rankings) uses CiteScore’s hierarchy using the terminology Subject areas and Subject categories for fields

[CWTS](#) Journal Indicators uses CiteScore’s hierarchy using the terminology Main areas and Subareas

### USERS of BIBLIOMETRIC DATA – Examples of University Rankers

[QS](#) – uses the categories Arts & Humanities, Engineering & Technology, Life Sciences & Medicine, Natural Sciences, Social Sciences & Management, currently with 48 subjects (Elsevier data)

[THE World Universities by Subjects](#) currently has 11 subjects, a mix of broad areas, such as Life Sciences, and a subject such as law. It has been adding subjects

[ARWU](#) (Global rankings of academic subjects)– broad areas Engineering, Life Sciences, Medicine, Natural Sciences and Social Sciences. They do not cover Arts & Humanities and have 22 Engineering subjects (Clarivate data)

[NTU Rankings](#) ( Performance Rankings of Scientific Papers World Universities from Taiwan)– six fields: Agriculture, Engineering, Life, Medical, Natural and Social Sciences (Clarivate data)