ARDI Basic Course Modules 1, 2, 3, 4, 5, 6, 7, 8 Workbook

Basic Course Module 1

Exercise 1

Usage Rules - True/False Answers

Users can download or print 50% of the articles from a journal issue.
true false
Faculty and staff can be given the institutional User Name and Password.
true false
Students can be given the institutional User Name and Password.
true false
Institutional users can access ARDI and other R4L programs while outside the country.
true false
ARDI/R4L articles can be used for instructional course reserve.
 true false
ARDI/R4L articles can be distributed to other institutions or organizations.
 true false

Basic Course Module 2

Exercise 1

Search Techniques

- ➤ Go to **Google** (http://www.google.com) on the Internet
- In the **Search box**, enter the keyword search terms **irrigation management**. How many citations are in the results of the search?
- Now enter irrigation management techniques. How many irrigation management techniques citations have been identified?
- > Enter irrigation management techniques AND developing countries into the Search box
- How many article citations have been identified?
- ➤ Repeat these searches (irrigation management, irrigation management techniques, irrigation management techniques AND developing countries in **Google Scholar** (http://scholar.google.com/), note the number of citations and compare this to results in the **Google** search. Which search engine has more results?
- Note the different types of material listed in the two search engines.
- Complete a Google Search (<u>http://www.google.com</u>) with your own keyword terms. If necessary use the AND term to limit your search.
- What keyword search did you complete and how many article citations were identified?
- ➤ Repeat this search in **Google Scholar** (http://scholar.google.com/), note the number of citations and compare this to results in the **Google** search.
- Note the different types of material listed in the two search engines.
- > When would you use Google or Google Scholar for a keyword search of WWW material?

- ➢ Go to the initial page of either the United Nations Environment Programme -http://www.unep.org/ or EPA: United States Environment Protection Agency -http://www.epa.gov/.
- There are five criteria for evaluating environment-related websites: Accuracy, Authority, Currency, Coverage and Objectivity. What do you think of the website using these criteria? Note this is your opinion of the website and also that not all the criteria apply to every website.
 On a 1 (poor) to 5 (excellent), evaluate either the LINER or ERA website.

	On a 1 (poor) to 5 (excenent), evaluate either the ONEP of EPA website.
	Accuracy
	Authority
	Currency
	Coverage
	Objectivity
	Design/Navigation
	Total
	(a total of 26 or above is excellent, 22-25 good, etc.)
	Note: see below for definitions of each category
	Note. See below for definitions of each category
	Go to 100 Top Environment Sites (World Environmental Organization) -
	http://www.world.org/weo/environment
	Open this website.
•	Evaluate this website using the same 1 (poor) to 5 (excellent) scale. Note – this is your
	opinion of the website and also that not all the criteria apply to every website.
	Accuracy
	Authority
	Authority

Will these criteria be useful to you for evaluating environment-related websites? What other criteria would you add?

Note: see below for definitions of each category

Definitions of categories

Currency______
Coverage_____
Objectivity____
Design/Navigation____

- Accuracy research methods explained, sources cited, includes bibliography; is a well written/edited information
- Authority author recognized as expert or from an academic or scientific organization (see url/web address)
- > Currency date website updated: use of current research & sources
- Coverage inclusion of material you need
- Design ease to navigate and find what you want (including links); speed of website
- Objectivity methods/results are not influenced by particular perspectives, values or bias; is not a personal website or that of an organization with a specific agenda

Basic Course Module 4

Exercise 1

- Go to the initial page of **ARDI** (http://www.ARDIsciences.org/)
- Click on the **LOGIN** button to access the full-text journals
- This will take you to the ARDI login page.
- When the login page opens, enter your institutional ARDI User Name and Password
 into the login boxes and then click on the Login button to access the ARDI site. . This will
 take you to the ARDI Content page.
- Logging in to ARDI will provide authentication to the publishers so that you can access full
 text articles and other resources via the project's website. If you do not register using your
 institution's User Name and password, you will not have access to the full text articles but
 only the citations.

Exercise 2

Accessing Journals by Title

- From the ARDI Content page, go to the Journals collection A-Z list.
- Find the *Journal of Atmospheric and Oceanic Technology* by clicking on **J** and then using the page tabs (1,2,3,4...) or listing **all the J** titles to locate the proper page.
- Select it from the list by clicking on the title.
- The journal *Journal of Atmospheric and Oceanic Technology* will open on the publisher's website. Note that this is an Open Access journal.
- What is the date, volume and issue number of the latest issue?
- Select an article from the latest issue available to you and open the full text.
- What are the title and author of the full-text article you viewed?
- Why you were interested in this article and could colleagues at your institution use the information?
- When you have finished, return to the ARDI Content page.

Exercise 3

Accessing Journals by Title

- From the ARDI Content page, go to the Journals collection A-Z list.
- Find a journal of interest to you by clicking on the appropriate letter of the alphabet
- Select it from the list by clicking on the title.
- The **chosen journal** will open on the publisher's website.
- What is the title, date and volume and issue number of the latest issue?
- Select an article from the latest issue available to you and open the full text.
- What are the author, title and publisher of the full-text article you viewed?
- Why were you interested in this article and could colleagues at your institution use the information?
- When you have finished, return to the ARDI Content page

Exercise 4

Accessing Journals by Subject Category

- From the ARDI Content page, click on the Subject list from the page's horizontal bar.
- Display the list of **Science General** journals by clicking on that phrase.

- Approximately how many journals are listed in this broad subject category
- Select the journal *Proceedings of the National Academy of Sciences of the United States of America (PNAS)* from the list by following the hyperlinked title by using the page tabs (1, 2, 3, 4...) to locate the proper page.
- PNAS will open on the publisher's website.
- Select an article from the latest issue available to you and open the full text.
- What are the title, author and publisher of the full-text article you viewed?
- Go back to the ARDI Content page.

Accessing Journals by Subject Category

- From the ARDI **Content** page, return to **Subject** list from the page's horizontal bar. Open a **subject** that is of interest to you.
- Which subject did you choose? Name three journals that are of particular interest to you.
- When you have finished, return to the ARDI Content page.

Exercise 6

Using the find journals by publisher option

- From the ARDI **Content** page, click on the **Publisher** list from the page's horizontal bar.
- Display the list of journals for the publisher **Directory of Open Access Journals (DOAJ)** by clicking on the name.
- In ARDI, approximately how many journals are available from this publisher?
- What journal titles (if any) would be of interest to you or someone at your institution? Note: the Accessible Content and All Items listing will be the same as these are Open Access Journals.
- From a title of interest to you, select the latest Issue and choose an article to open in full text.
- What are the title, author and issue of the full-text article you viewed?
- Return to the **Browse Publishers** list from the page's horizontal bar.
- Click on a **publisher** of interest to you.
- Which ARDI journals are of specific interest and why?
- Go back to the ARDI **Content** page.

Exercise 7

Finding e-books in the ARDI website

Note: The major e-book publishers may not grant access to your institution. If you do not see the title(s) in the **Accessible content** list, go to the next exercise.

- > From the ARDI Content page, click on the E listing of the Books collection A-Z list.
- Find the link to the **Ecological Geography of the Sea** and open this E-book. Note you will have to scroll down the alphabetical list to locate this title.
- From the contents list, open link to Chapter 4 Physical Control of Ecological Processes. Note that you can download the chapter as a PDF file.
- Return to the **Table of Contents** and open another chapter. Which chapter have you opened and what are the topics of interest to you?
- How could this electronic textbook be used in your institution?
- Return to ARDI Content page. Using the A-Z alphabetical list of the Books collection list, browse some of the 'letters' and open the link to a specific e-book that is of interest to you.

- What is the title of the book? Were you able to open the book without significant problems?
- ➤ When you have finished, return to the ARDI **Content** page.

- > Open Intech Open Access books at http://www.intechopen.com/books/.
- ➤ In Intech, you will note four BROWSE BY SUBJECT options Physical Sciences..., Life Sciences, Health Sciences and Social Sciences and Humanities. Click on Physical Sciences, Engineering and Technology. Click on one of the numerous sub-categories. Are there titles of use to you or those at your institution?
- Now open one specific book by clicking on the **book logo**. Note the **Open Access** symbol. Can you download the whole book or individual chapters? You can return to the Subject list by clicking the **Subject** link in the top horizontal bar.
- In the **Search publications** box (top right), enter **wind turbines** or a **subject of interest to you**. If you did not enter neonatal care, what terms did you search? What are the numbers of books and papers (often book chapters) from the search result? (See the left column). Click on the **Book** list. Are the book titles of use to you or individuals at your institution?

Exercise 9

- Open the National Academies Press website at http://www.nap.edu/

 a repository of over 5000 full-text ebooks from various U.S. Institutes and Councils.
- In the Browse by Topic list, click on Environment and Environmental Studies. Also note the Energy and Energy Conservation topic option.
- Open the Browse by Subtopic listing and open one of the options that is of interest to you. Which Subtopic did you open? List two books of interest to you. Note that you can Search books within the subtopic.
- Return to the initial page of this website (http://www.nap.edu/). Enter rainfall in the search box and click on **Search** icon. What is the number of books listed? Would any of these be of use at your institution? If yes, name two books of use.
- In the Search box, enter a search for a **topic of interest to you** and click on the **Search** icon.
- What are your search terms? How many books are listed in your search results? To download the full text of a book, remember that you will have to register (free).

Basic Course Module 5

- From the ARDI Content page, note the Search inside ARDI full-text using Summon search box. Use the Country Specific search link (below search box) and open your specific country (if not available, use the Research4Life Summon General Use link).
- A new search box will open. Enter **medicinal plants AND diversity** in the **search box** and click on **enter key** or the **Search symbol** (magnifying glass).
- What is the number of search results?
- From the **CONTENT TYPE** (left column), how many are **journal articles** or **conference proceedings** or **reports** or **e-books**? Which types of articles would be of interest to you?
- For one of the citations, display the **Preview** option which is the magnifying glass to the right of the title. Is this abstract of use to you?

- In the REFINE YOUR SEARCH option (top left column), check on Scholarly and Peer-Review or ones of interest to you. What is the number of search results? Is this smaller than the original search results number? If smaller, is the number significantly lower?
- In the **CONTENT TYPE** option, check the box to limit the search to **Journal Article**. What is the number of the search results?
- In the PUBLICATION DATE option (scroll down left column), limit the search by clicking on Last 12 Months box. You also can enter specific dates by using the calendars in the from and to boxes. Remember that you must Clear the previous limits (Scholarly and Peer-Review and Journal Article) or these limits will remain in the new PUBLICATION DATE search.
- How many articles were in this PUBLICATION DATE limit?
- For access to full-text articles and book chapters,
 - Reminder #1 some of the citations may be from the SAML publishers; if the SAML publisher has granted access, you will need to 'authorize' the access to the publisher's portal. For instructions, see ARDI_Module_4_Appendix.
 - Reminder #2 while some articles may be accessible directly from Summon, you will need to return to the ARDI Content page and the Journal collection A-Z or Publisher lists to see if the access to journals/articles has been granted by the publishers. What is available will be noted in the Accessible Content list.
- Note: for subsequent searches, there are options to **Keep Search Refinements** (which keeps the limits) or **New Search** (which removes the limits).

- Return to your Country Specific Search box and enter a search of interest to you in the search box and click on Search symbol.
- What is the number of search results? How many Journal Article and Book/eBook citations are listed?
- In the **CONTENT TYPE** option, check the box to limit the search to **Journal Article** and **any other options you choose.** What other limits did you choose? What is the number of the search results?
- In the **PUBLICATION DATE** option (scroll down left column), limit the search by clicking on **Last 12 Months** option. Remember that you must **Clear** the previous limits (**Journal Article**) or these limits will remain in the **PUBLICATION DATE** search.
- How many articles were in this **PUBLICATION DATE** limit?
- Are there other ways you would like to limit this search?
- For access to full-text articles and book chapters,
 - Reminder #1 some of the citations may be from the SAML publishers; if the SAML publisher has granted access, you will need to 'authorize' the access to the publisher's portal. For instructions, see ARDI_Module_4_Appendix.
 - Reminder #2 while some articles may be accessible directly from Summon, you will need to return to the ARDI Content page and the Journal collection A-Z or Publisher lists to see if the access to journals/articles has been granted by the publishers. What is available will be noted in the Accessible Content list.

Basic Course Module 6

- From the ARDI Content page, click on Databases for discovery (right column). Open the CiteSeer search tool.
- Enter food security and technology in the search box and click on the Enter key or Search icon.

- ➤ How many documents are displayed by the search results? How are the results sorted? Do the search results have abstracts?
- Click on the Sorted by: dropdown menu and switch to Year (Descending) order. Then resort the results by clicking on Citation Count. Which sort do you prefer?
- > Return to the **search** box and complete a search for a **topic of interest to you**.
- What are your search terms? How many documents are listed in your search results?
 What Sorted by option did you use? Would this be a useful source to full-text resources?
- ➤ How would you access the full-text articles and/or books citations?

- From the ARDI Content page, click on Databases for discovery (right column). Open Microsoft Academic Search.
- Enter solar energy in the search box and click on the Enter key or Search icon.
- How many documents are displayed by the search results? How are the results sorted? Do the search results have abstracts?
- Click on the Sort by: dropdown menu and switch to Newest First order. Then resort the results by clicking on Most Citations. Which sort do you prefer?
- Note the **Limits** in the left column. Which would be useful to you? Per the **Date Range** option, enter **2017 to 2018**.
- > Return to the **search** box and complete a search for a **topic of interest to you**. Note that the **Date Range** limit returns to the original/broader number of years.
- What are your search terms? How many documents are listed in your search results? What **Sorted by** option did you use? Would this be a useful source to full-text resources? How would you access the full-text article and/or book citations?

Exercise 3

Using the SCOPUS Bibliographic Database – Keyword Search. Note that the publisher does not grant access to all R4L countries and territories

- Open the Search inside ARDI full-text through database and article searching list on the ARDI Content page. Once the list has opened, click on SCOPUS (Elsevier).
- Remember you must have completed the Login or you will not be able to access the fulltext articles
 - **Note:** if your organization is a Group A with exclusions or a Group B institution, you may not have access to **SCOPUS** and would not be able to complete these three assignments.
- In the Document search boxes, enter environmental modeling of land use change in the Search for box. For now, retain the default information in the other boxes (Article Title, Abstract, Keywords). In the Limit To search boxes, also retain the default information (Published in All years to present, Document Type All and check boxes in all the Subject Areas)
- Click on the Search button.
- What is the number of **Document Results** for this search?
- From the left column, which **Year** has the most publications and which **Author name** has published the most? Note that you can use the **search within results** option and there also is an **Advanced search** alternative.
- Click on **Show all abstracts** next to the **Documents results.**
- Does Scopus have more or less citations that the same search in Environmental Index?
 Remember, you will need to go to ARDI to access many of the full-text articles from the Journals collection A-Z list.

• Return to the **Scopus search** page. You can use the web browser's **back** button or open **SCOPUS** from the **database and article searching** list.

Exercise 4

Using the SCOPUS Bibliographic Database – Adding Limits

- From the SCOPUS search page, we will add other limits to the current environmental modeling of land use change search. Make sure you have returned to the Search page.
- In the Limit To Year search boxes, Click on the radio buttons for 2015, 2014, 2013, 2012, 2011 and Limit to button.
- What is the number of **Documents results** with this additional limit?
- Return to the SCOPUS search page using the back button.
- In the **Limit To** search boxes, change the **Document Type** to **Article or Review.** Click on the **Limit to** button. Note that the **Limits** are listed at the top of the page above the **documents results** information. Most of these limits can be applied using the **Refine Limits** column on the left side of the results page.
- What is the number of **Documents results** with this additional limit?
- Return to the **SCOPUS search** page using the **back** button.
- In the Limit To search boxes, delete the check boxes for health sciences and social sciences and humanities. Click on the Search button.
- What is the number of **Documents results** with this additional limit?
- Have these options made the Scopus search more precise?
- Remove all the restrictions in the Limit To boxes or they will be applied to any future search. Return to the Scopus search page. You can use the web browser's back button or open SCOPUS from the database and article searching list.

Exercise 5

Using the SCOPUS Bibliographic Database - Keyword Search and Adding Limits

- Open the initial **search** page by clicking on **Edit** in the current search results page above the **document results** line.
- In the document search box, enter a search of interest to you in the Search for box. For now, reset the default information in the other boxes (Article Title, Abstract, Keywords in Search for box). In the Limit To search boxes, also reset the default information (Published in All years to Present, Document Type All and check boxes in all the Subject Areas)
- Click on the **Search** button.
- What is the name of the search? What is the number of **Document Results** for this search?
- Does the search have the type of material you are looking for?
- Return to the Scopus search page. You can use the web browser's back button.
- If you wish, change the defaults In the Limit To search boxes.
 Note: limits can be applied using the Refine Limits column on the left side of the results page.
- What is the number of **Document Results** for this revised search?
- What **Limit To** search boxes did you change? Remember that the **Limits** are listed at the top of the page above the **documents results** information.

Remember to remove all the restrictions in the Limit To boxes. Return to the SCOPUS search page. You can use the web browser's back button or open SCOPUS from the database and article searching list.

Exercise 6

Using the SCOPUS Bibliographic Database – E-mailing and Exporting Search Results

- Open the search by clicking on Edit in the current search results page above the document results line.
 - Note: you must have an active MY SCOPUS account to do these additional features see **MY SCOPUS** on the top right corner of the Search page
- In the document search box, enter species diversity AND water stress or a search of interest to you in the Search for box. Click on the Search button.
- What is the number of **Document Results** for this search?
- After the search results are displayed, click on (check) the check box for 5 or 6 articles.
- Below the document results number, click on Export. You now have the choice to Export, Print, E-mail or Create for Bibliography. In the Output Type options section, check the bullet for E-mail.
- In the **TO** box, enter your **E-mail** address (or the E-mail address of a colleague); select **TEXT** in **E-mail format** bullets and **Abstract format** in **Output** drop down menu. Click on **Send**. In your email account, you will receive a message.
- Click on Back and return to the Output page. Now click on the bullet for Export. For this format, click on Text (Ascii format) from the Export Format drop down menu and, from the Output drop down menu, choose the Abstract format. Click on Export.
 A new Scopus export page will appear. Using the instructions from your web browser, save this file to a hard or flash drive.

Specific Instructions to save the document are:

- o copy and paste the text into a Word document or Notepad
- o Internet Explorer select **FILE** then **SAVE AS** from your browser's toolbar above. be sure to save as a plain text file (.txt) or a 'Web Page, HTML only' file (.html)
- Mozilla FireFox select FILE then SAVE FILE AS from your browser's toolbar above.
- Chrome, select right click (with your mouse or keypad) on this page and select SAVE AS or, from top right, click on the 3 horizontal bar icon and then go to Save page as option.
- Click on the web browsers **back** icon. After Scopus is displayed, return to the **Scopus Search** page by clicking on **Search** from the horizontal bar at the top of the page.
- Return to **ARDI Content** page.

Basic Course Module 7

- Connect to the Internet and open your internet browser.
- Type or copy/paste https://doaj.org/ into the address box, click on "GO" or hit the Return key.
- ➤ The full text of ALL **Directory of Open Access Journals (DOAJ)** content must be available for free and be Open Access without delay (i.e. no embargo period). This is a basic requirement for entry into DOAJ. How many journals are listed in this gateway and how many are searchable at the article level?

- In the DOAJ Search box, enter environmental monitoring and land use or a search of interest to you and click on the question mark.
- How many citations are listed for this search?
- ➤ How is the access to the journals organized?
- In the DOAJ Search box, enter a search of interest to you and click on the question mark.
- ➤ How many citations are listed for this search?
- Did you find useful articles?
- Type or copy/paste http://www.biomedcentral.com/journals/ into the address box, click on "GO" or hit the Return key.
- This links to **BioMed Central**, an open access publisher; published articles are freely available on the Internet as the authors pay **BioMed Central** to publish them. Note: Many of BMC's journals are not in ARDI because they are not registered in the Directory of Open Access Journals.
- How is the access to the journals organized?
- What broad subject area would be most useful to you?
- Can you complete a keyword search in BioMedCentral?
- Can an author submit a manuscript through this website?
- Type or copy/paste https://www.ncbi.nlm.nih.gov/pmc/ into the address box, click on "GO" or hit the Return key.
- ➤ This links to **PubMed Central**, a free archive of USA funded science related articles that have been deposited in this repository
- Who is the sponsor of this digital archive?
- How many articles are in this database and how many journals are in the Full Participation journals list?
- In the PMC Search box, enter food security and technology or a search of interest to you and click on Search.
- ➤ How many citations are listed for this search?
- Click on article for one of the titles to go to the PMC abstract and link to the full-text article.

Copy the following url to access the Google Custom Search Non-governmental Organizations Search Engine:

https://www.google.com/cse/home?cx=012681683249965267634:g4g16p05-ao

You also can access this by searching in Google for **Google Custom Search Non-governmental Organizations Search Engine**

- Enter small mammal* AND diversity in the Google Custom Search box and click on Search
- How many citation search results are listed?
- ➤ What types of publications are list on the 1st page of search results?
- > From your institution's perspective, would some of these resources be of use?
- Complete a search of interest to you. What types of material was listed on the 1st page of the search results? Would some of these resources be of use?
- Copy the following url to access the Google Custom Search Intergovernmental Organizations Search Engine:

https://www.google.com/cse/home?cx=006748068166572874491:55ez0c3j3ey

You also can access this by searching in Google for **Google Custom Search Inter governmental Organizations Search Engine**

- Enter environmental monitoring AND water management in the Google Custom Search box and click on Search.
- ➤ How many citation search results are listed?
- ➤ What types of publications are list on the 1st page of search results?
- > Would some of these resources be of use for governmental planning in your country?
- Complete a search of interest to you. What types of material was listed on the 1st page of the search results? Would some of these resources be of use?

Exercise 3

- > Open the **Open i** search engine at <u>openi.nlm.nih.gov</u> an open access biomedical image search engine.
- Enter land use and environmental monitoring in the search box and click on the Search icon. Note the drop down menu that lists more precise terms (e.g. lung cancer metastatic)
- ➤ Click on one of the **images** that is listed. Note how a description of the image is listed.
- ➤ Double click on the **image** to display the image and citation, description of the figure, the abstract of the image's article plus, if possible, a link to the related full-text article. Click on **share** icon (above the image itself). What are the share **options**?
- Return to the initial page of the search engine (<u>openi.nlm.nih.gov</u>). Complete a **search of interest to you**. What search did you complete? Have you located useful images?
- In the **Limits** horizontal bar above the numerous images, click on **Rank By**. For this search, what Limits would be of use to you?
- From the **Limits** bar, now click on **Image Type**. Note that the default contains **Exclude Graphics**. What Image Type(s) would be useful?
- View any other Limits that are of interest to you?

Exercise 4

- ➤ Open the Networked Digital Library of Theses and Dissertations (NDLTD) **Global Search Tool** at **Error! Hyperlink reference not valid.** a database of 4,000,000 thesis and dissertations with links to many full-text documents.
- > Enter solar energy and technology in the search box and click on the Search icon.
- ➤ How many documents are displayed by the search results?
- ➤ How many thesis and dissertations are in English, French or Portuguese?
- > Click on one citation that says has links. Is there access to the full-text document?
- In the Publication year search box, enter 2012 and click on Publication year
- How many documents are listed in the search results?
- > Return to the **search** page and complete a search for a **topic of interest to you**.
- What are your search terms? How many thesis and dissertations are listed in your search results? Would this be a useful source to full-text resources?

- ➤ Open the **Open Grey** website at **Error! Hyperlink reference not valid.** a database of 700,000 grey literature references in Europe with links to many full-text documents
- Enter food security and technology in the search box and click on the Search icon.
- ➤ How many documents are displayed by the search results?
- What types of organizations are listed in the left-column Refine your search list?

- > Scroll down the Refine your search column to the **language** limit. How many of these sources are in English? In the **doctype** limit, how many are thesis?
- > Return to the **search** page and complete a search for a **topic of interest to you**.
- What are your search terms? How many documents are listed in your search results? Would this be a useful source to full-text resources?

Basic Course Module 8 - No exercises

Assignment

You have completed all the exercises in the ARDI Basic Course. This includes exercises on the ARDI usage rules, using the ARDI homepage (finding articles by title, subject and publisher and Summon Search tool) and searching CiteSeer, Academic Search and SCOPUS plus using grey literature Internet resources.

Updated - July, 2018