

# Library Research Skills Framework



# Introduction

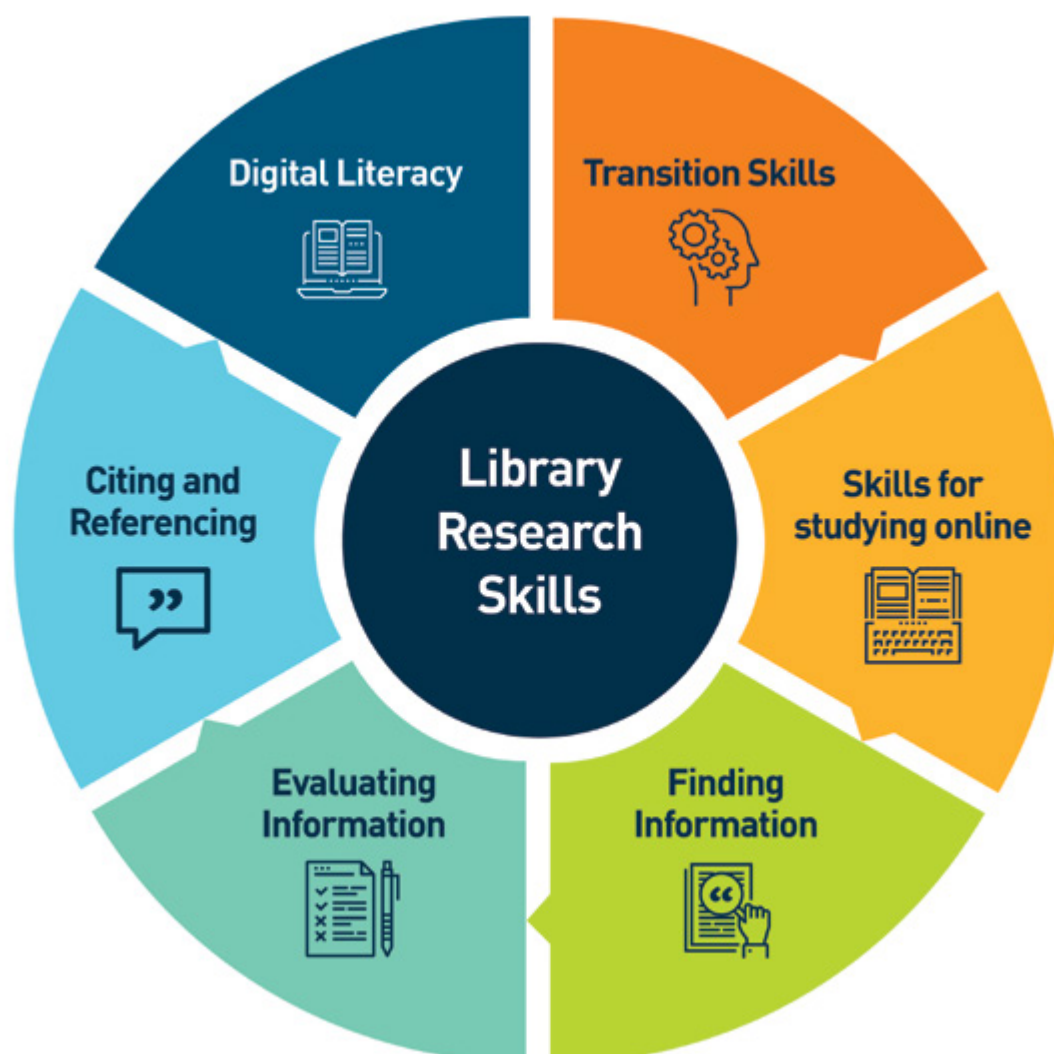
**The Library research skills framework is a tool you can use to ensure the appropriate skills are embedded throughout a programme in core and compulsory modules at the University of Southampton. Not all subjects and programmes will be the same, but this gives a general guide to work from.**

Research skills are essential to support students in the transition to university, to develop the skills for studying online, develop skills for finding and evaluating information, to cite and reference appropriately and learn about academic integrity as well as develop the digital literacy skills required such as managing their digital footprint.

Using the framework, the learning outcomes and the assessment within a programme and a module you can ensure that there is constructive alignment. The appropriate skills are taught at the point of need to give your students the knowledge they need to complete assignments and develop the research skills required throughout their degree and into their careers and lifelong learning.

The framework along with learning outcomes will allow us to use curriculum mapping to develop the best journey for students through each programme.

The framework is split into the following sections:



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# Library Research skills framework:

## Undergraduate Programme level overview

SKILLS	OVERVIEW
<b>Transition Skills</b>	<p>Explain the differences and the transition between school, college or previous study and studying using the University of Southampton Library.</p> <p>Be able to access a University Library, search the literature, use the internet, understand academic integrity, plagiarism and referencing.</p>
<b>Skills for studying online</b>	<p>Be able to learn online using your online library, using ebooks, journals and other useful resources and understanding academic integrity online.</p>
<b>Finding and synthesising Information</b>	<p>Distinguish between different types of information, identify key sources of information in the subject area or context and have an awareness of different information types e.g. primary sources which are anything that gives you direct evidence about the people, events or phenomena that you are researching, including first-hand accounts in interviews, surveys, raw data and observations, original art works; secondary sources which are anything that interprets, evaluates, describes or analyses information from primary sources including text books, reviews, commentaries, histories and reports gathering data from other studies; sources will include print formats, electronic or digital formats, manuscripts, non-text resources, peer-reviewed, non-academic, freely available, subscriber only, invisible web, as relevant to the subject or context.</p> <p>Demonstrate the ability to plan and adapt and successfully carry out a search e.g. by broadening or narrowing, using keywords and synonyms, and using the language and synonyms that are 'of' the community under investigation and/or being written about with consideration of subjects or contexts relating to themes of equality, diversity and inclusivity.</p> <p>At higher levels of study, demonstrate the ability to independently find and keep up-to-date with information relevant to the subject or context. Demonstrate the ability to think critically about who is being citing in the literature.</p> <p>Demonstrate the ability to think critically about how and why citation practices (how credit is given to people for their ideas) can suppress some voices and highlight others and show consideration of this in relation to independent projects or research work.</p> <p>Development of these skills over time leads to the ability to produce an independently conducted literature search in a specific subject area, making effective use of advanced search techniques such as citation searching.</p>
<b>Evaluating Information</b>	<p>Demonstrate ability to choose and apply evaluation criteria when finding and using information, from being able to distinguish between examples of information of high and low quality on the internet, through to being able to identify and apply appropriate quality criteria such as authority and bias to evaluate a range of resources (e.g. books, articles, websites, personal contacts, online tools) effectively.</p>

SKILLS	OVERVIEW
<b>Citing and Referencing</b>	Be able to articulate reasons for acknowledging others' thoughts and ideas in your assignments. Distinguish between examples of digital content having different conditions of use, e.g. copyright. Be able to articulate what is meant by academic integrity, plagiarism, and the rationale for referencing. Be able to create a reference and a reference list and be aware that there are different referencing styles. Distinguish between different systems available for managing references, e.g. Endnote online, Mendeley, Zotero. Choose the appropriate one based on your technical knowledge.
<b>Digital literacy</b>	<p>Distinguish between functions, tools, and sites for finding and recording information online and functions, tools, and sites for creating and sharing information online. Demonstrate ability to access tools and sites that are required for study at the University of Southampton.</p> <p>Demonstrate basic use of a range of tools and websites for finding and recording information online. Identify instances of digital technologies used for the creating and sharing of knowledge in a specific subject area. Demonstrate the ability to use a variety of online contacts and social networks to find out information. Engage in the creation, use, sharing and repurposing of digital subject-related information within your studies. Evaluate your current practice and digital skills and know where to go for further development.</p>

## General Resources

- Getting started at University website <http://generic.wordpress.soton.ac.uk/gettingstarted/>
- Academic skills website <https://library.soton.ac.uk/SASH>
- Assignment Planner <https://library.soton.ac.uk/sash/assignment-planner>
- Dissertation Planner <https://library.soton.ac.uk/sash/dissertation-planner>
- Training and Workshops <https://library.soton.ac.uk/sash/workshops/online-training>
- Supporting Staff for Education <https://library.soton.ac.uk/engagement>
- Contact the Library <https://library.soton.ac.uk/home/contact>
- Digital Capabilities skills pathways <https://www.thinglink.com/scene/1557724123289878531>



# Research skills framework by level of academic study, transitions, foundation and undergraduate

## Undergraduate (level 1-3)



## TRANSITION SKILLS

### Skills

Investigate how the library staff and the University Library Service can help you with your studies. Describe where to find online library resources for the subject you will be studying. Explain how you can use library resources when you are away from the campus.

Be able to identify what an academic book is and how it is structured, identify the main similarities and differences between print and electronic books, understand what academic journals and journal articles are, understand what peer review means in the academic context, understand why reading lists play a key role in your studies.

Describe what type of information you are required to find at university, recognise where and how that information can be found online. Develop an effective strategy for finding information, compare and evaluate different websites. Understand the advantages and disadvantages of using Google and other search engines.

Appraise the advantages and disadvantages of using Wikipedia. Explain how to protect your reputation online and manage your digital footprint. This includes how to use social media responsibly, and engage appropriately via social media and email, and look after your digital wellbeing.

Articulate what plagiarism is, explain how to avoid plagiarising by quoting, paraphrasing, citing and referencing, correctly and appropriately and understanding key referencing styles.

Be able to define the difference between formative and summative feedback, identify how written feedback is provided at university and identify some of the most consistent comments from markers and interpret what they mean.

Evaluate your current practice and digital skills and know where to go for further development.

### Resources

Getting started website – your library  
<http://generic.wordpress.soton.ac.uk/gettingstarted/your-library/>

Getting started website – research literature  
<http://generic.wordpress.soton.ac.uk/gettingstarted/research-literature/>

Getting started website - searching  
<http://generic.wordpress.soton.ac.uk/gettingstarted/searching/>

Getting started website – using the web  
<http://generic.wordpress.soton.ac.uk/gettingstarted/using-the-web/>

Getting started website – plagiarism and referencing  
<http://generic.wordpress.soton.ac.uk/gettingstarted/plagiarism-referencing/>

How to avoid Plagiarism recorded workshop  
<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=ce403708-771c-4053-b31a-ace200e642bd>

How to reference video  
<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=abd49bdf-4foa-46ff-ba11-ace000956a20>

Getting started website - getting feedback  
<http://generic.wordpress.soton.ac.uk/gettingstarted/getting-feedback/>

Digital Capabilities skills pathways  
<https://www.thinglink.com/scene/1557724123289878531>



## SKILLS FOR STUDYING ONLINE

### Skills

Understand how to learn online using your online library including using ebooks, journals and other useful resources. Refer to online citing and referencing guidance to enable you to work with integrity in situations where you are studying and being assessed online.

### Resources

Skills for Studying Online  
<https://library.soton.ac.uk/studyonline>

## Foundation



## FINDING INFORMATION

### Skills

Distinguish between the types of information found using a search engine and an online library, and between websites for different purposes.

Search for information using a given range of sources.

Carry out a basic search for information on the web or within a website on a pre-defined topic, using the guidance provided.

Demonstrate awareness that the top results in a web search may be paid for or sponsored listings and that results may be personalised.

### Resources

Getting Started website - searching  
<https://generic.wordpress.soton.ac.uk/gettingstarted/searching/>

Subject Guides  
<https://library.soton.ac.uk/home/subjects>

Library Search  
<https://library.soton.ac.uk/LibrarySearch>



## EVALUATING INFORMATION

### Skills

Distinguish between examples of information of high and low quality on the internet.

Use quality criteria to carry out initial filtering of material from a search.

Find and choose appropriate digital tools to support study, such as apps for word processing or note taking.



## EVALUATING INFORMATION (CONTINUED)

### Resources

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Getting Started website  
<https://generic.wordpress.soton.ac.uk/gettingstarted/evaluate/>

Digital Capabilities skills pathways  
<https://www.thinglink.com/scene/1557724123289878531>

Evaluating Information  
<https://library.soton.ac.uk/sash/evaluation>



## CITING AND REFERENCING

### Skills

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Articulate reasons for acknowledging others' thoughts and ideas in your assignments.

Distinguish between examples of digital content having different conditions of use, e.g. copyright.

### Resources

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Getting Started website - plagiarism  
<https://generic.wordpress.soton.ac.uk/gettingstarted/plagiarism/>

Referencing and citing online resources to avoid plagiarism (Harvard examples)  
<https://www.youtube.com/watch?v=Ty94tX4BsSI>

How to avoid Plagiarism recorded workshop  
<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=ce403708-771c-4053-b31a-ace200e642bd>

How to Reference recorded workshop  
<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=abd49bdf-4foa-46ff-ba11-ace000956a20>

Cite Them Right Online  
<https://www.citethemrightonline.com/>

Copyright - information for students  
<https://library.soton.ac.uk/copyright/students>



## DIGITAL LITERACY

### Skills

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Distinguish between functions, tools and sites for finding and recording information online: internet browsers, search engines, copy/paste and download functions, etc.

Distinguish between functions, tools and sites for creating and sharing information online e.g. email, instant messaging, social media tools, graphics and photo sites, video sites, podcast sites.

Demonstrate ability to access tools and sites that are required for study at university.

Follow good practice in the management of files and folders.

Be familiar with simple features of data management in spreadsheets. Interpret graphical and visual representations of data.

Evaluate your current practice and digital skills and know where to go for further development.

Know the importance of managing your digital identity and profile privacy settings. Know the difference between private (e.g. texts or email) and public (e.g. social networking sites) online communications.



## Skills

Practice looking after your digital wellbeing.

Know how different media can reach distinct audiences e.g. X (previously called Twitter) or Instagram and use different communication styles accordingly. Be aware of the impact of false or damaging communication.

Share digital content for study with peers using collaborative software.

Recognise the benefits of group work and differentiate between formal and informal social networking sites.

Follow instructions to share a variety of digital content using different tools e.g. Blackboard and use collaborative software for tutorials, e.g. Teams.

Explain the benefits of collaborating with peers for study purposes.

Distinguish between formal and informal social networking for study or work.

## Resources

Link to being digital [Open University]

<http://www.open.ac.uk/libraryservices/beingdigital>

Powtoon on accessing library resources

<https://www.youtube.com/watch?v=q-yU2BXW1D8>

Skills for studying online

<https://library.soton.ac.uk/studyonline>

Digital Capabilities skills pathways

<https://www.thinglink.com/scene/1557724123289878531>

## Level 1



## FINDING AND SYNTHESISING INFORMATION

### Skills

Identify key sources of information in the subject area or context and have an awareness of different information

types (e.g. print / electronic, primary / secondary, freely available / subscriber only / invisible web) as relevant to the subject or context.

Demonstrate the ability to plan and adapt and successfully carry out a search e.g. by using broader or narrower terms, using keywords and synonyms.

Successfully find a journal article or book from a reference.

Synthesise information and evidence from given sources in your own work.

### Resources

Skills for studying online

<https://library.soton.ac.uk/studyonline>

Using your library

<https://library.soton.ac.uk/sash/using-your-library>

Library Search

<https://library.soton.ac.uk/LibrarySearch>

Subject Guides

<https://library.soton.ac.uk/home/subjects>



## EVALUATING INFORMATION

### Skills

Identify and apply appropriate quality criteria to evaluate information, including personal contacts and online tools.

Identify relevant and reliable tools and information in a given context, by applying basic quality criteria, and filter results based on this.

Judge the value and relevance of different kinds of information such as academic, professional, personal or political.

Apply basic criteria to evaluate the quality of given information (e.g. 'Who wrote it?', 'What did they write?' and 'Why did they write it?').

Use quality criteria to carry out initial filtering of material from a search. Find and select online tools based on their relevance to the study context, e.g. dictionary apps.

Demonstrate the ability to check the facts and evaluate any citations or references that are presented in a generative AI response. Early studies of generative AI (for example ChatGPT, Bard) have discovered flaws in the output. There have been instances where references to non-existent journal articles are produced, sometimes termed "hallucinations". When prompted for academic-standard text, generative AI tools have produced factually incorrect information.

### Resources

Digital Capabilities skills pathways  
<https://www.thinglink.com/scene/1557724123289878531>

Evaluating Information  
<https://library.soton.ac.uk/sash/evaluation>



## CITING AND REFERENCING

### Skills

Articulate what is meant by academic integrity and plagiarism.

Articulate the rationale for referencing, be able to create a reference and be aware that there are different referencing styles.

### Resources

What is academic integrity?  
<https://library.soton.ac.uk/sash/what-is-academic-integrity>

Referencing and citing online resources to avoid plagiarism (Harvard examples) - video (no audio)  
<https://www.youtube.com/watch?v=Ty94tX4BsSI>

How to avoid Plagiarism recorded workshop  
<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=ce403708-771c-4053-b31a-ace200e642bd>

How to Reference recorded workshop  
<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=abd49bdf-4foa-46ff-ba11-ace000956a20>

Cite Them Right Online  
<https://www.citethemrightonline.com/>



## DIGITAL LITERACY

### Skills

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Demonstrate basic use of a range of tools and websites for finding and recording information online: internet browsers, search engines, copy/paste and download functions.

Identify instances of digital technologies used for the creating and sharing of knowledge in a specific subject area.

Follow good practice in the management of files and folders in different spaces (institutional, personal or cloud storage). Accurately record your search results.

Manage and maintain your digital profiles and identity, use privacy settings appropriately. Engage with and communicate using digital media, know how their use can affect your personal digital profile.

Use digital data in spreadsheets and other tools.

Interpret graphical and visual representations of data, use them as evidence.

Explain how messages are designed and communicated for different purposes and using different media. Observe “netiquette”, e.g. when using forums.

Work with peers using collaborative software for a specific task.

Distinguish different team roles.

Share files and content with multiple people, e.g. using University of Southampton tools such as Teams or Blackboard.

Use collaborative software for a specific task, e.g. Teams.

Work together with peers online and identify the different roles and contributions needed to produce work collaboratively.

Use external platforms for study purposes, e.g. social media.

### Resources

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Skills for studying online

<https://library.soton.ac.uk/studyonline>

Keeping on top of it all: managing your research data/material

<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=bf815ba4-780c-47c7-9765-ae2foocfe3do>

Digital Capabilities skills pathways

<https://www.thinglink.com/scene/1557724123289878531>





## FINDING AND SYNTHESISING INFORMATION

### Skills

Identify a range of key sources of information in the subject area. Distinguish between primary and secondary sources, and academic and non-academic sources.

Demonstrate the ability to select appropriate resources for an assignment.

Independently carry out a simple subject search within a single database.

Demonstrate the ability to use a range of database functionality (e.g. truncation, phrase searching, date limits, combining search terms, sorting, saving, exporting) within a single database and to interpret results.

Demonstrate the ability to use terminology well in searches of a database or other search engines. Depending on the subject or content consider the different terminology that might

be used in other communities and use the language 'of' the community under investigation in searches.

Demonstrate the ability to use a range of search engine functionality (e.g. phrase searching, combining search terms, searching a specific domain, site or file type) within a search engine and to interpret results.

Review results and refine searches if necessary.

Synthesise information from a range of diverse materials. This may involve working with pieces of information, data, images etc. and combine them in a way which constitutes a plan or structure which was not there before.

### Resources

Database Orientation Programme  
[https://library.soton.ac.uk/DB\\_Orientation](https://library.soton.ac.uk/DB_Orientation)

Finding Information for your Dissertation or Research Project <https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=65186db8-2234-40d2-947b-acda00a93ca3>

Subject Guides  
<https://library.soton.ac.uk/home/subjects>

Literature searching – Advanced, 27 minutes. Aimed at Health Sciences and follows on from Literature searching – Basic, 10 minutes. Recaps and builds on the previous video plus includes the use of Subject Headings (also called MESH/thesaurus of controlled vocabulary)  
<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=cdc9efaf-b4bf-40a3-8335-ae05009afb6d>

Embedded teaching sessions

Home - Diversity, Inclusion and Belonging - LibGuides@Southampton at University of Southampton Library  
<https://library.soton.ac.uk/diversity>

Grey Literature is any publication created outside recognised academic or commercial outlets and difficult to classify (e.g. policy documents and organisational reports)

What is grey literature? | Grey literature | Library | University of Leeds [https://library.leeds.ac.uk/info/1110/resource\\_guides/7/grey\\_literature](https://library.leeds.ac.uk/info/1110/resource_guides/7/grey_literature)

Home - Grey Literature - Subject guides at Monash University  
<https://guides.lib.monash.edu/grey-literature/home>

Grey literature - Systematic Reviews for the Social Sciences - LibGuides at University of Bristol <https://bristol.libguides.com/systematic-reviews/grey-literature>

Literature Database Search filters are standardised strategies that help identify literature within specific databases using a comprehensive collection of search terms. University of Alberta Library staff have created several search filters for health science databases including search filters for indigenous peoples  
<https://guides.library.ualberta.ca/health-sciences-search-filters/indigenous-peoples>



## EVALUATING INFORMATION

### Skills

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Apply appropriate quality criteria to evaluate a range of resources (e.g. books, articles, websites, personal contacts, data and online tools) effectively, being aware of potential bias and credibility.

Apply quality criteria to filter results from a range of sources.

Apply relevant quality criteria to evaluate and use a range of digital tools to support study.

Demonstrate the ability to check the facts and evaluate any citations or references that are presented in a generative AI response. Early studies of generative AI (for example ChatGPT, Bard) have discovered flaws in the output. There have been instances where references to non-existent journal articles are produced, sometimes termed “hallucinations”.

When prompted for academic-standard text, generative AI tools have produced factually incorrect information.

### Resources

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Embedded teaching sessions

Critical thinking and appraisal

<https://generic.wordpress.soton.ac.uk/researchmethods/literature-review-2/lit-review-sub-page-3/>

Evaluating Information

<https://library.soton.ac.uk/sash/evaluation>

Understanding Health Research: A tool for making sense of health studies

<https://www.understandinghealthresearch.org/>



## CITING AND REFERENCING

### Skills

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Produce an accurate list of references for common sources using the appropriate style.

Distinguish between different systems available for managing references, e.g. Endnote online, Mendeley, Zotero. Choose the appropriate one based on your technical knowledge.

Demonstrate awareness of who you are citing in your research and consider if certain voices or marginalised groups are represented within the literature.

### Resources

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Citing and referencing

<https://library.soton.ac.uk/sash/referencing>

How to avoid Plagiarism recorded workshop

<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=ce403708-771c-4053-b31a-ace200e642bd>

How to Reference recorded workshop

<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=abd49bdf-4foa-46ff-ba11-ace000956a20>

Referencing and citing online resources to avoid plagiarism (Harvard examples) - no audio

<https://www.youtube.com/watch?v=Ty94tX4BsSI>

Cite Them Right Online

<https://www.citethemrightonline.com/>



# DIGITAL LITERACY

## Skills

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Demonstrate the ability to use digital tools and resources.

Demonstrate the ability to use a variety of online contacts and social networks to find out information.

Articulate what it means to maintain your digital wellbeing.

Manage digital information using appropriate digital tools and methods, such as reference management software. Systematically record and manage search results.

Manage digital profiles for different personal, professional and academic networks. Maintain a positive digital reputation in online communications.

Manage digital data in spreadsheets and other media. Interpret and apply digital data relevant to the subject of study.

Communicate with different audiences, for a variety of purposes, using different digital media (e.g. blog posts, presentations, infographics). Be respectful and inclusive when communicating online.

Create and share digital content using a range of collaborative tools and software to achieve shared goals for study or work.

Negotiate team roles and reflect on the collaboration and show awareness of online group dynamics.

Create and share subject-related content and ideas using digital tools.

Use a range of collaborative software for study or work, e.g. Wikis, Teams or Blackboard Collaborate.

Work in digital teams to produce shared content or meet shared study goals; negotiate and develop roles for collaboration.

Reflect on the collaborative process, roles, tools, and outcomes.

Share digital content from external platforms in collaborative study spaces, e.g. Blackboard forums.

## Resources

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Link to being digital [Open University]  
<http://www.open.ac.uk/libraryservices/beingdigital>

Copyright - information for students  
<https://library.soton.ac.uk/copyright/students>

Keeping on top of it all: managing your research data/material  
<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=bf815ba4-780c-47c7-9765-ae2foocfe3do>

Digital Capabilities skills pathways  
<https://www.thinglink.com/scene/1557724123289878531>

Group work  
<https://library.soton.ac.uk/sash/group-work>





## FINDING AND SYNTHESISING INFORMATION

### Skills

Demonstrate the use of a wide range of resources appropriate to the subject area. Devise and carry out a strategy for finding the information needed. Use a range of functionality, e.g. citation searching. Depending on the subject or content consider the different terminology in a search strategy that might be used in other communities and use the language 'of' the community under investigation in searches.

Give evidence of the use of sources of current information for keeping up-to-date.

Identify and frame problems or research questions and select appropriate information to address these, acknowledge that information can come from both academic and non-academic sources and primary and secondary sources.

Independently find the information needed, whether from a person or an online resource, and which may be in resources published outside of traditional commercial publishing. Identify content published outside of traditional commercial publishing (which usually has not been peer reviewed) that is often called 'Grey Literature'.

Synthesise information from a range of diverse materials on a complex subject, e.g. statistics, academic articles, blog posts, news articles. Produce a comprehensive literature review in a specific subject.

Demonstrate the ability to think critically about how and why citation practices (how credit is given to people for their ideas) can suppress some voices and highlight others and show consideration of this in relation to independent projects or research work.

### Resources

Database Orientation Programme  
[https://library.soton.ac.uk/DB\\_Orientation](https://library.soton.ac.uk/DB_Orientation)

Finding Information for your Dissertation or Research Project  
<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=65186db8-2234-40d2-947b-acda00a93ca3>

Subject Guides  
<https://library.soton.ac.uk/home/subjects>

Literature searching – Advanced, 27 minutes. Aimed at Health Sciences and follows on from Literature searching – Basic, 10 minutes. Recaps and builds on the previous video plus includes the use of Subject Headings (also called MESH/thesaurus of controlled vocabulary) <https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=c9c9efaf-b4bf-40a3-8335-ae05009afb6d>

Embedded teaching sessions

Home - Diversity, Inclusion and Belonging - LibGuides@Southampton at University of Southampton Library  
<https://library.soton.ac.uk/diversity>

Literature Database Search filters are standardised strategies that help identify literature within specific databases using a comprehensive collection of search terms. University of Alberta Library staff have created several search filters for health science databases including search filters for indigenous peoples <https://guides.library.ualberta.ca/health-sciences-search-filters/indigenous-peoples>

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Home - Grey Literature - Subject guides at Monash University  
<https://guides.lib.monash.edu/grey-literature/home>

Grey literature - Systematic Reviews for the Social Sciences - LibGuides at University of Bristol  
<https://bristol.libguides.com/systematic-reviews/grey-literature>



## EVALUATING INFORMATION

### Skills

Demonstrate knowledge of different tools for critically evaluating sources, including tools to evaluate sources published outside the typical, traditional scholarly sources and critically think about and assess the more mainstream resources.

Apply comprehensive quality criteria to critically evaluate information, tools and data from any source (with an awareness of authority, bias etc.) enabling you to focus on the most appropriate to meet your context.

Demonstrate the ability to check the facts and evaluate any citations or references that are presented in a generative AI response. Early studies of generative AI (for example ChatGPT, Bard) have discovered flaws in the output. There have been instances where references to

non-existent journal articles are produced, sometimes termed “hallucinations”. When prompted for academic-standard text, generative AI tools have produced factually incorrect information.

Demonstrate the ability to scrutinise any data presented in the literature and check for any potential bias in data samples and the population sampled (e.g. white, western, males).

Use quality criteria to filter results from searches and focus on the most relevant information or data within documents, e.g. by skim reading article abstracts. Evaluate and use digital tools and media in any context (e.g. study, personal or professional).

### Resource

Embedded teaching sessions

Evaluating Information  
<https://library.soton.ac.uk/sash/evaluation>

Evaluating information video (Uses Delphis in the example – this has been replaced by Library Search) <https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=d9bafc52-ded7-42f7-9830-ad7400e95bdo>

Critical thinking and appraisal  
<https://generic.wordpress.soton.ac.uk/researchmethods/literature-review-2/lit-review-sub-page-3/>

Understanding Health Research: A tool for making sense of health studies <https://www.understandinghealthresearch.org/>

Critically appraising for antiracism: recognising racial bias in research [University Library Service, Cardiff University] – examples in this tool are mainly from health sources  
[https://xerte.cardiff.ac.uk/play\\_19619#page1](https://xerte.cardiff.ac.uk/play_19619#page1)

Digital Capabilities skills pathways  
<https://www.thinglink.com/scene/1557724123289878531>



## CITING AND REFERENCING

### Skills

Demonstrate accurate and appropriate citing and referencing with appropriate paraphrasing and use of quotes.

Construct a reference list or bibliography according to subject or discipline requirements.

Respect rules of copyright and use alternatives such as Creative Commons licensing when sharing others’ digital content in your own work.

Use digital tools and media ethically and legally, repurposing and adapting content within original terms of use.

## Resources

How to avoid Plagiarism recorded workshop  
<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=ce403708-771c-4053-b31a-ace200e642bd>

How to Reference recorded workshop  
<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=abd49bdf-4foa-46ff-ba11-ace000956a20>

What is academic integrity?  
<https://library.soton.ac.uk/sash/what-is-academic-integrity>

Cite Them Right Online  
<https://www.citethemrightonline.com/>

Copyright  
<https://library.soton.ac.uk/copyright/students>

Embedded teaching sessions



## DIGITAL LITERACY

### Skills

Engage in the creation, use, sharing and repurposing of digital subject-related information within your studies.

Maintain digital wellbeing.

Manage and curate digital information in different spaces using appropriate digital tools and methods, such as reference management software. Manage a wide range of references using digital tools. Consider ethical, privacy and intellectual property issues around digital information you need to store.

Develop digital profiles and digital identity to support your academic and career aims (e.g. online CV).

Analyse, interpret and re-present data using advanced tools and techniques, where appropriate to the subject. Design, administer and interpret online surveys.

Design effective communications for different purposes and digital spaces, using appropriate digital media and a range of editing tools.

Facilitate digital collaborations and share insights gained from external networks.

Identify and use a variety of collaborative tools and software to produce digital content for a wider audience.

Use a variety of digital collaboration tools and software to produce and share resources, knowledge and content for study or work.

Identify the most appropriate collaborative software for study or work, e.g. Blackboard or Teams.

Initiate and facilitate formal digital collaborations to produce shared content for a wider audience for study or work.

Reflect on online group dynamics and roles, tools and outcomes.

Collaborate comfortably across cultural, national and/or subject specialist boundaries.

Share insights and experiences gained from external networks to enhance learning.

### Resources

Types of Data & Research Information – Research Methods  
<https://generic.wordpress.soton.ac.uk/researchmethods/managing-data/managing-data-sub-page1/>

Top tips for best practice  
<https://generic.wordpress.soton.ac.uk/researchmethods/managing-data/top-tips-for-best-practice/>

Policies & Data Protection – Research Methods  
<https://generic.wordpress.soton.ac.uk/researchmethods/managing-data/policies-data-protection/>

Digital Capabilities skills pathways  
<https://www.thinglink.com/scene/1557724123289878531>

# Library Research skills framework: Postgraduate Taught (PGT) overview

PGT



## TRANSITION SKILLS

### Skills

Identify how the library staff and the University Library Service can help you with your studies. Explain where to find online library resources for the subject you will be studying. Describe how you can use library resources when you are away from the campus.

Describe what an academic book is and how it is structured, identify the main similarities and differences between print and electronic books, Describe what academic journals and journal articles are, explain what peer review means in the academic context, recognise why reading lists play a key role in your studies.

Explain what type of information you are required to find at university, recognise where and how that information can be found online. Develop an effective strategy for finding information, compare and evaluate different websites. Explain the advantages and disadvantages of using Google and other search engines.

Explain the advantages and disadvantages of using Wikipedia, how to protect your reputation online, how to use social media responsibly and engage appropriately via social media and email.

Manage digital profiles, and proactively engage in professional online communities to further career and academic goals.

Explain what academic integrity and plagiarism is, demonstrate good academic practice of quoting, paraphrasing, citing and referencing appropriately and correctly using key referencing styles.

Be able to explain the difference between formative and summative feedback, identify how written feedback is provided at university and identify some of the most consistent comments from markers and interpret what they mean.

Identify the areas you or your supervisor are responsible for, the research process you will go through; identify any bias you may have towards your research and determine how self-reflection can help the research process.

Understand the different types of research, models and approaches. Outline research design and the research process. Articulate the importance of originality and critical analysis and how to select a topic and write research questions.

Have a clear understanding of the integrity and ethics of research. Be able to briefly list the main principles of academic integrity as included in the University of Southampton Regulations Governing Academic Integrity. Be able to outline what is plagiarism through examples and explain in your own words how to avoid it.

Give examples of ways to manage your references using technology or manual methods explain where to find the referencing style recommended by your school or department.

Identify when you may need to credit or seek permission such as copyright to use other academic work in your research or writing, as well as if you need to apply for ethics approval for your research.

Be able to complete a literature review, articulate the purpose of a literature review, describe different resource types, create and conduct a literature search, evaluate the resources you find and describe the main structural principles of a literature review chapter.

Learn how to create an action plan to successfully complete your project, develop strategies to manage your time effectively, learn useful tips for successful teamwork and learn how to manage risks associated with completing a project.

Be able to identify the types of data and research materials you will be collecting, be aware of policies and data protection that apply, and apply the top tips for best practice. Consider ethical, privacy, intellectual property issues and work within restrictions that may apply to the type of digital information you need to store.

## Resources

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Getting started website  
<http://generic.wordpress.soton.ac.uk/gettingstarted>

Database Orientation Programme  
[http://library.soton.ac.uk/DB\\_Orientation](http://library.soton.ac.uk/DB_Orientation)

Research Methods module  
<http://generic.wordpress.soton.ac.uk/researchmethods/>

Digital Capabilities skills pathways  
<https://www.thinglink.com/scene/1557724123289878531>

Copyright  
<https://library.soton.ac.uk/copyright/students>



## SKILLS FOR STUDYING ONLINE

### Skills

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Understand how to learn online using your online library including using ebooks, journals and other useful resources. Refer to online citing and referencing guidance to enable you to work with integrity in situations where you are studying and being assessed online using.

### Resources

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Skills for studying online  
<https://library.soton.ac.uk/studyonline>



## FINDING INFORMATION

### Skills

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Demonstrate the ability to search independently across a comprehensive range of information.

Demonstrate a critical and systematic approach to keeping up-to-date using the most appropriate tools and resources, e.g. RSS, mailing lists, search alerts.

Produce an independently conducted literature search in a specific subject area, making effective use of advanced search techniques such as citation searching.

Demonstrate the use of a wide range of resources appropriate to the subject area. Devise and carry out a search strategy for finding the information needed. Use a range of functionality, e.g. citation searching, word proximity. Depending on the subject or content consider the different terminology in a search strategy that might be used in other communities and use the language 'of' the community under investigation in searches.

Give evidence of the use of sources of current information for keeping up-to-date.



## FINDING INFORMATION CONTINUED

### Skills

Identify and frame problems or research questions and select appropriate information to address these, being aware that information can come from both academic and non-academic sources and primary and secondary sources.

Independently find the information needed, whether from a person or an online resource, and which may be in resources published outside of traditional commercial publishing. Content published outside of traditional commercial publishing which usually has not been peer reviewed is often called 'Grey Literature'.

Synthesise information from a range of diverse materials on a complex subject, e.g. statistics, academic articles, blog posts, news articles. Produce a comprehensive literature review in a specific subject.

Demonstrate the ability to think critically about how and why citation practices (how credit is given to people for their ideas) can suppress some voices and highlight others and show consideration of this in relation to independent projects or research work.

### Resources

Database Orientation Programme  
[https://library.soton.ac.uk/DB\\_Orientation](https://library.soton.ac.uk/DB_Orientation)

Research Methods module  
<http://generic.wordpress.soton.ac.uk/researchmethods/>

Subject Guides  
<https://library.soton.ac.uk/home/subjects>

Literature searching – Basic, 10 minutes.  
This video uses an example search for “handwashing” and demonstrated on the CINAHL database)  
<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=b441ee08-258c-4c6f-857f-ad9booc7a00d>

Literature searching – Advanced, 27 minutes.  
Aimed at Health Sciences and follows on from Literature searching – Basic, 10 minutes. Recaps and builds on the previous video plus includes the use of Subject Headings (also called MESH/thesaurus of controlled vocabulary)  
<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=cdc9efaf-b4bf-40a3-8335-ae05009afb6d>

Citation searching video  
(No captions with video, old library homepage, Web of Science website has been updated since this video was made in 2017)  
<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=9d6fafb9-82ed-4fe9-9439-ad8b7b594e5a>

Embedded teaching

Home - Diversity, Inclusion and Belonging - LibGuides@Southampton at University of Southampton Library  
<https://library.soton.ac.uk/diversity>

Literature Database Search filters are standardised strategies that help identify literature within specific databases using a comprehensive collection of search terms. University of Alberta Library staff have created several search filters for health science databases including search filters for indigenous peoples  
<https://guides.library.ualberta.ca/health-sciences-search-filters/indigenous-peoples>

Grey Literature is any publication created outside recognised academic or commercial outlets and difficult to classify (e.g. policy documents and organisational reports)

What is grey literature? | Grey literature | Library | University of Leeds  
[https://library.leeds.ac.uk/info/1110/resource\\_guides/7/grey-literature](https://library.leeds.ac.uk/info/1110/resource_guides/7/grey-literature)

Home - Grey Literature - Subject guides at Monash University  
<https://guides.lib.monash.edu/grey-literature/home>

Grey literature - Systematic Reviews for the Social Sciences - LibGuides at University of Bristol  
<https://bristol.libguides.com/systematic-reviews/grey-literature>





# EVALUATING INFORMATION

## Skills

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Engage in critical appraisal, including judgements on reliability and validity, of your own work, the work of others and of online tools or systems.

When talking about source evaluation demonstrate understanding of potential search engine and generative Artificial Intelligence algorithm bias.

Critically appraise digital tools and information from any source using comprehensive quality criteria, to filter large quantities of information; make judgements on own work and the work of others.

Demonstrate knowledge of different tools for critically evaluating sources, including tools to evaluate sources published outside the typical, traditional scholarly sources and critically think about and assess the more mainstream resources.

Demonstrate the ability to check the facts and evaluate any citations or references that are presented in a generative

AI response. Early studies of generative AI (for example ChatGPT, Bard) have discovered flaws in the output. There have been instances where references to non-existent journal articles are produced, sometimes termed “hallucinations”. When prompted for academic-standard text, generative AI tools have produced factually incorrect information.

Demonstrate the ability to scrutinise and question any data presented in the literature and check for any potential bias in data samples and the population sampled (e.g. white, western, males).

Define the scope of a research question and apply relevant criteria to filter large quantities of information related to the question.

Critically evaluate, select and use unfamiliar digital tools and media for any context (e.g. study, personal or professional).

## Resources

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Evaluating Information  
<https://library.soton.ac.uk/sash/evaluation>

Research Methods module  
<http://generic.wordpress.soton.ac.uk/researchmethods/>

Evaluating information video  
(Uses Delphis in the example which has now been replaced by Library Search)  
<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=d9bafc52-ded7-42f7-9830-ad7400e95bdo>

Digital Capabilities skills pathways  
<https://www.thinglink.com/scene/1557724123289878531>

Understanding Health Research:  
A tool for making sense of health studies  
<https://www.understandinghealthresearch.org/>

Critically appraising for antiracism: recognising racial bias in research [University Library Service, Cardiff University] – examples in this tool are mainly from health sources [https://xerte.cardiff.ac.uk/play\\_19619#page1](https://xerte.cardiff.ac.uk/play_19619#page1)



## CITING AND REFERENCING

### Skills

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Apply a suitable method for managing a large volume of information. Manage a large number and range of references using digital tools.

List the main principles of academic integrity as included in the University of Southampton Regulations Governing Academic Integrity.

Understand plagiarism and how to avoid it.

Be able to give examples of ways to manage your references using technology or manual methods and explain where to find the referencing style recommended by your school or department.

Understand when you may need to credit or seek permission such as copyright or ethics approval to use other academic work in your research or writing. Respect rules of copyright and use alternatives such as Creative Commons licensing when sharing others' digital content in your own work, and when creating digital content.

Articulate the legal requirements surrounding the use and re-use of information and identify sources of relevant advice.

### Resources

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Research Methods module

<http://generic.wordpress.soton.ac.uk/researchmethods/>

Academic Integrity

<https://library.soton.ac.uk/sash/what-is-academic-integrity>

How to avoid Plagiarism recorded workshop

<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=ce403708-771c-4053-b31a-ace200e642bd>

How to Reference recorded workshop

<https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=abd49bdf-4foa-46ff-ba11-ace000956a20>

Copyright - information for students

<https://library.soton.ac.uk/copyright/students>

Cite Them Right Online

<https://www.citethemrightonline.com/>

Referencing software

<https://library.soton.ac.uk/sash/referencing-software>

Citing and Referencing

<https://library.soton.ac.uk/sash/referencing>



## DIGITAL LITERACY

### Skills

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Engage in and manage professional or academic interactions using multiple digital tools.

Apply digital techniques to conduct and share research and give evidence of engagement with and proactive participation in academic and/or professional online networks.

Apply strategies to maintain digital wellbeing.

Manage your digital profile and proactively engage with professional networks to support academic and career aims (e.g. via online CV, LinkedIn).

Interpret and re-present data relevant to the subject of study. Where appropriate to the subject, carry out statistical tests, queries and data analyses. Design, administer and interpret large-scale online surveys.

Create, adapt, share digital content with an awareness of audience and purpose, using appropriate tools. Identify the most effective ways to use research outputs (e.g. reports, conference proceedings, journal articles) to create impact. Recognise the difference between formal publication and informal information exchange.

Lead on the use of collaborative software and multiple digital tools towards the production of shared work. Select, recommend and use appropriate collaborative software for group study or work, e.g. planning, meeting software, file sharing and diary management tools.

Lead and engage in digital collaborations or in digital environments towards the production of shared work. Reflect on and evaluate online group dynamic and roles, tools and outcomes. Collaborate comfortably across cultural, national and/or subject specialist boundaries.

### Resources

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Link to being digital [Open University]

<http://www.open.ac.uk/libraryservices/beingdigital>

Recorded workshop: Dissertations: combining structure and formatting (Word for PC)

<https://coursecast.soton.ac.uk/Panopto/Pages/Viewer.aspx?id=21c5ff1b-0462-453a-9e0d-a991010df3e4>

**Types of Data & Research Information – Research Methods – University of Southampton Library** ([soton.ac.uk](http://soton.ac.uk))

**Top Tips for Best Practice – Research Methods – University of Southampton Library** ([soton.ac.uk](http://soton.ac.uk))

**Policies & Data Protection – Research Methods – University of Southampton Library** ([soton.ac.uk](http://soton.ac.uk))

Keeping on top of it all: managing your research data/material <https://southampton.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=bf815ba4-780c-47c7-9765-ae2foocfe3do>

Digital Capabilities skills pathways <https://www.thinglink.com/scene/1557724123289878531>

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(Accessed: dd Month year)



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Or email [libenqs@soton.ac.uk](mailto:libenqs@soton.ac.uk)



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