Faculty of Natural and Life Sciences

Year: 2025/2026

1st year Biology degree

Subject: MTT 1

Tutorial (TD) N° 03

Citation of References in Text

Summary of Exercise Goals

These exercises help students:

- 1. Differentiate between Harvard and Vancouver styles.
- 2. Practice paraphrasing and quoting.
- 3. Cite multiple sources accurately.
- 4. Develop confidence in applying citation styles in academic writing.
- 5. Citing multiple sources by different authors.
- 6. Citing multiple works by the same author in different years.
- 7. Combining citations from both same and different authors on related topics.

Differentiating Between Harvard and Vancouver Styles

1. Structure of In-Text Citations

• Harvard Style:

- o Uses the author-date format.
- The author's last name and the year of publication are placed directly in the text, with a page number if a direct quote or specific detail is referenced.
- **Example**: (Smith, 2020) or Smith (2020) mentions that biodiversity is essential.

• Vancouver Style:

- Uses *numbered citations* in the order they appear in the text.
- Each source is assigned a unique number, which corresponds to a full reference in the list of references at the end.
- **Example**: Biodiversity is essential [1] or Smith argues that biodiversity is essential [1].

2. Use Cases in general

• Harvard Style:

- o Common in social sciences and humanities.
- Emphasizes authorship and publication date, making it easy to see when the research was conducted.

• Vancouver Style:

- o Common in medical, biological, and technical fields.
- Efficient for texts with numerous citations, as numbers save space and simplify reading.

3. Tips for Remembering the Difference

- Harvard Style = *Author-Date* format.
- Vancouver Style = *Numbered* format.

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Exercise 1: Basic Harvard Style Citation

Cite the following statements in Harvard style using the information provided, and write each statement as if you were citing it in an academic paper.

- 1. A study on plant biodiversity emphasizes that diverse ecosystems are more resilient to environmental changes.
 - o Source 1: Author: Williams, R., Year: 2019, Title: Plant Biodiversity and Ecosystem Resilience, Journal: Ecology Today, Page: 45.
- 2. Another research states that photosynthesis efficiency decreases with rising temperatures.
 - o **Source 2**: Author: Chen, Y., Year: 2020, Title: *Climate Change and Photosynthesis*, Book: Plant Physiology in Changing Climates, Page: 32.

Exercise 2: Basic Vancouver Style Citation

Rewrite each sentence below using Vancouver style citation.

- 1. Research on cell metabolism shows that higher glucose levels can affect cell function.
 - o Source 3: Author: Johnson, T., Year: 2021, Title: Cell Metabolism, Journal: Journal of Biological Studies, Page: 150.
- 2. Another study highlights that protein synthesis rates vary with cell type.
 - o Source 4: Author: Adams, K., Year: 2022, Title: Protein Synthesis in Cells, Journal: Biochemistry Research Journal, Page: 88.

Exercise 3: Paraphrasing with Harvard and Vancouver Style

Paraphrase the following information and cite it using both Harvard and Vancouver styles.

Statement: "Water scarcity has become an increasing challenge in arid regions due to climate change impacts."

Source 5: Author: Green, S., Year: 2020, Title: Climate Change and Water Resources, Journal: Environmental Science Journal, Page: 23.

Exercise 4: Direct Quotations with Harvard and Vancouver Style

Use a direct quotation in the text and cite it using both Harvard and Vancouver styles.

Statement: The author states, "Biodiversity loss is one of the greatest threats to ecosystem health."

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• **Source 6**: Author: Brown, P., Year: 2019, Title: *Biodiversity and Ecosystem Health*, Journal: *Ecology and Evolution*, Page: 120.

Exercise 5: Citing a Source with More Than Three Authors

Cite this source with both Harvard and Vancouver styles.

Statement:

- 1. A recent study on genetic diversity indicates that variations within species help prevent diseases.
 - o **Source 7**: Authors: Smith, T., Brown, R., Chen, L., and Davis, M., Year: 2021, Title: *Genetic Diversity in Populations*, Journal: *Journal of Genetics*, Page: 34.

Exercise 6: Citing Multiple Sources

Rewrite the sentence below by citing both sources in Harvard and Vancouver styles.

Statement: Research shows that invasive species can alter ecosystem balance, and nutrient cycles are often disrupted by their presence.

- **Source 8**: Author: Smith, J., Year: 2018, Title: *Invasive Species and Ecosystems*, Journal: *Journal of Ecology*, Page: 60.
- **Source 9**: Author: Lee, K., Year: 2019, Title: *Ecosystem Nutrient Cycles*, Journal: *Environmental Studies*, Page: 102.

Exercise 7: Citing the Same Author with Different Sources

Rewrite the following sentences using Harvard and Vancouver styles to cite multiple works by the same author.

Statements 01: Research covers two critical areas: forest conservation and urban biodiversity.

- **Source 10**: Author: Smith, J., Year: 2017, Title: *Forest Conservation Strategies*, Journal: *Environmental Journal*, Page: 12.
- o **Source 11**: Author: Smith, J., Year: 2019, Title: *Urban Biodiversity and Ecosystem Services*, Journal: *Ecology Review*, Page: 34.

Statements 02: The enzyme complexes were produced using *Aspergillus niger* strain BG and *Trichoderma afroharzianum* isolate AZ 12, isolated from a forest plot dotted with olive trees in the IGHRAM region of Akbou, Bejaia, in north-eastern Algeria.

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- o **Source 12**: Azzouz, Z., Bettache, A., Djinni, I., Boucherba, N., Benallaoua, S., 2020. Biotechnological production and statistical optimization of fungal xylanase by bioconversion of the lignocellulosic biomass residues in solid-state fermentation. Biomass Convers. Biorefinery 1–13.
- Source 13; Azzouz, Z., Bettache, A., Boucherba, N., Amghar, Z., Benallaoua, S., 2020. Optimization of xylanase production by newly isolated strain *Trichoderma afroharzianum* isolate az 12 in solid state fermentation using response surface methodology. Cellul. Chem. Technol. 54, 451–462.

Exercise 8: Combining Multiple Citations by the Same and Different Authors

Write one version with Harvard style and another with Vancouver style, ensuring all sources are properly included.

Statement 01: Recent studies by Wilson and others demonstrate the impact of climate change on marine biodiversity, while additional work by Lopez confirms similar trends.

- Source 14: Author: Wilson, T., Year: 2018, Title: Climate Change and Marine Life, Journal: Marine Biology, Page: 22.
- **Source 15**: Author: Wilson, T., Year: 2020, Title: *Impact of Rising Temperatures on Ocean Species*, Book: *Climate Impacts on Ecosystems*, Page: 45.
- **Source 16**: Author: Lopez, R., Year: 2019, Title: *Global Warming Effects on Ocean Biodiversity*, Journal: *Environmental Change*, Page: 33.

Statement 02: Studies highlight that climate adaptation and water conservation are key strategies to address environmental challenges.

- **Source 17**: Author: Green, S. and Clark, A., Year: 2020, Title: *Climate Adaptation Methods*, Journal: *Environmental Policy Journal*, Page: 101.
- Source 18: Author: Green, S., Year: 2019, Title: Water Conservation Techniques, Journal: Water Resources Review, Page: 58.
- **Source 19**: Author: Thompson, B., Year: 2021, Title: *Environmental Challenges*, Journal: *Sustainable Development*, Page: 200.