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| **Minor Award Name** | Spreadsheet Methods |
| **Minor Award Code** | 4N1120 |
| **Level** | 4 |

**Suggested resources to support delivery:**

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| **Theme/Topic** | **Type** | **Relevance** | **Author/Source** | **Web Link** |
| **Spreadsheet Purpose** | Website | Essential reading- To enable the learner to outline the purpose of spreadsheets that include identifying applications suitable for a spreadsheet | Christina Ash | <http://yourbusiness.azcentral.com/purpose-using-spreadsheet-6324.html> |
| **Basic Spreadsheet** | Internet Document | Essential reading- A document which takes the learner through the basic of spreadsheet using diagrams and notes | Mech Utah. | <http://www.mech.utah.edu/~rusmeeha/references/SpreadSheetBasic.pdf> |
| **Spreadsheet Purpose** | Website | Stating the main reasons for using spreadsheets compared to other systems | Steve Lander | <http://science.opposingviews.com/purpose-using-spreadsheet-1097.html> |
| **Spreadsheet Purpose** | Book | This book was written with the understanding that students get frustrated by multi-step procedures that illustrate only the final outcome. Ron Larsen, in his hallmark approach, provides screen images for each and every each step allowing students to easily follow along as they try to perform each task | David C. Kuncicky, Ronald W. Larsen | <https://books.google.ie/books?id=vBGRkZ_abnAC&q=introduction+to+spreadsheets&dq=introduction+to+spreadsheets&hl=en&sa=X&ved=0ahUKEwj7xaKch6jMAhWgHsAKHeS_Bi4Q6AEIJDAA> |
| **Spreadsheet Terms** | Online Document | Essential reading- Defining spreadsheets terms, for example, spreadsheet, label, formula, function | Lauren Raggio | <https://quizlet.com/4541177/microsoft-excel-terminology-flash-cards/> |
| **Spreadsheet Components** | Website | Identifying the component parts of a workbook, to include: worksheet, column, row, cell, formula bar, name box | Uregina | <http://www2.cs.uregina.ca/~cs104/what_to_do/check_the_lab_outline/Seminar5Excell/components.html> |
| **Spreadsheet Components** | Online  Document | A document which identifies all the essential components and actions relevant to creating a Microsoft excel worksheet | Conejoadultschool | <http://www.conejoadultschool.org/COMPUTER/Handouts-april2013/Excel%202010,%20Level%201.pdf> |
| **Spreadsheet Language** | Website | To assist in the use of the language associated with spreadsheet applications | Ted French | <http://spreadsheets.about.com/od/excel101/tp/080726_ten_spreadsheet_terms.htm> |
| **Spreadsheet Creation** | Online video | A video that states the primary function and processes involved in creating a spreadsheet document | Samantha Nikole | <https://www.youtube.com/watch?v=Q-POGqYyUBs> |
| **Spreadsheet Creation** | Book | Spreadsheets Made Simple for Administrators, Teachers, and School Board Members: covers how the material in question had been presented and determined how to present it more effectively. Those effective presentations are provided in this comprehensive, user-friendly spreadsheet guide. | Harvey Singer | <https://books.google.ie/books?id=-ZIOuU-JOGoC&dq=spreadsheet+terms&source=gbs_navlinks_s> |
| **Simple Arithmetic Operators** | Internet Document | A document which details the range of Arithmetic operators like addition (+) subtraction(-), multiplication (x), division (/) | Learnfree.org | <http://www.gcflearnfree.org/googlespreadsheets/12/print> |
| **Simple Arithmetic Operators** | Book | Applications of Spreadsheets in Education:  offer the reader a broad overview of the diversity of applications, carefully chosen articles from engineering (power systems and control), mathematics (calculus, differential equations, and probability), science (physics and chemistry), and education are provided. | Mark A. Lau, Stephen J. Sugden | <https://books.google.ie/books?id=tyd8rQ-gySgC&dq=spreadsheets+arithmetic&source=gbs_navlinks_s> |
| **Other Operators** | Online Document | The document outlines the other operators that may be used in a spreadsheet like percentage ( % ) greater than (>) or Less than ( <) or equal to (=) | Excel Functions | <http://www.excelfunctions.net/Excel-Operators.html> |
| **Simple Formulae & Functions** | Online Document | Informs the user of simple formulae and functions used within a spreadsheet including sum, average, max, min, and count | Theresa A Scott | <http://biostat.mc.vanderbilt.edu/wiki/pub/Main/TheresaScott/Excel.FnsFrmls.pdf> |
| **Simple Formulae & Functions** | Book | Excel 2013 Formulas: Shows how to create financial formulas and tap into the power of array formulas. Serves as a guide to using various lookup formulas, working with conditional formatting, and developing custom functions | John Walkenbach | <https://books.google.ie/books?id=EgCDaGHc7AUC&dq=spreadsheet+formulas+and+functions&source=gbs_navlinks_s> |
| **Advanced Formulae & Functions** | Website | State the functions & formulae used to perform calculations and the structure of the formula. It also shows the importance of consistency of these when replicated over a range of cell | Tech on the net | <http://www.techonthenet.com/excel/formulas/> |
| **Formatting Spreadsheets** | Website | Shows a range of formatting commands including font size, font colours, backgrounds colours, bold, alignment, borders, numbers, decimals and dates | Excel Easy | <http://www.excel-easy.com/basics/format-cells.html> |
| **Formatting Spreadsheets (continued)** | Video | This tutorial teaches how to: Move cells, change cell colours, alter text orientation, add images, and change text colour. | Edutechional | <https://www.youtube.com/watch?v=zQySybE8Z44> |
| **Formatting Spreadsheets** | Book | Formatting and Printing: Describes the basic skills needed to format and print Microsoft Excel worksheets, with sections on moving and sizing columns, applying borders, changing fonts, and using the auto format function | Sue Etherington | <https://books.google.ie/books?id=90LDGW-BywQC&q=formatting+spreadsheets&dq=formatting+spreadsheets&hl=en&sa=X&ved=0ahUKEwjS1dCvi6jMAhWMA8AKHU3iBrIQ6AEIPzAE> |
| **Editing Spreadsheets** | Video | The video shows how to make simple changes to a spreadsheets by adding columns or rows and adjusting widths | Study Opportunities | <https://www.youtube.com/watch?v=5CBcnXSM9s4> |
| **Charts and Graphs** | Website | A how to website that show the user how to create a chart using either pie, column, bar and line charts | Wikihow | <http://www.wikihow.com/Create-a-Graph-Using-a-Spreadsheet> |
| **Spreadsheets Manual** | Book | Step by Step Spreadsheets: This book details fundamental spreadsheet methods and facilitates practical experience in spreadsheet design and implementation. | Alan Dillon | <http://www.gilleducation.ie/computer-applications/computer-applications/step-by-step-spreadsheets1> |
| **Computer Applications** | Book | Essential Computer Applications: All concepts, explained in a simple and logical manner, are supported with business-type examples  Each chapter begins with defined learning objectives, and ends with a summary/recap on key points  A Glossary of Terms is provided at the end of each section | Séamus O'Neill and Gerard Morgan | <http://www.gilleducation.ie/computer-applications/computer-applications/essential-computer-applications-4th-edition> |
| **Simple Spreadsheet** | Online Video | Microsoft Excel Tutorial for beginners who want to make a basic spreadsheet in Excel. This Microsoft Excel Tutorial shows how to make columns and rows that add up or sum automatically. Beginners in Excel will find this an easy tutorial to follow. | Computerbasics | <https://www.youtube.com/watch?v=0W_933RnCXM> |
| **Advanced Spreadsheet** | Book | Advanced Spreadsheet Projects in Excel: The book is aimed at a number of Advanced courses of study within the National Qualifications Framework currently available in schools and colleges | Julian Mott, Ian Rendell | <https://books.google.ie/books?id=7LC0AAAACAAJ&dq=advanced+spreadsheet&hl=en&sa=X&ved=0ahUKEwiM1NvBm6jMAhWLAsAKHYz8Cz0Q6AEILjAC> |
| **Advanced Spreadsheet** | Website | Advanced Spreadsheets enables learners to demonstrate they have the knowledge and skills needed for furthering there learning in spreadsheets | Chandoo | <http://chandoo.org/wp/advanced-excel-skills/> |
| **Advanced Spreadsheet** | Online Video | Advanced Features Of Microsoft Excel - Advanced Formatting For Excel Spreadsheets | How2instructionalvid | <https://www.youtube.com/watch?v=HQmJLNyPCFE> |

**Useful Organisations:**

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| **Name** | **Contact Information** |
| Teaching ICT | <http://www.teach-ict.com/> |
| Tech Terms | <http://techterms.com/> |
| Gill and Mc Millan Third level | <http://www.gilleducation.ie/computer-applications> |
| ECDL | <http://www.ecdl.org/programmes/index.jsp?p=2927&n=2941> |
| National Council for Curriculum and Assessment (NCCA) | [www.ncca.ie](http://www.ncca.ie) |
| Quality and Qualifications Ireland (QQI) | [www.qqi.ie](http://www.qqi.ie) |
| Further Education Support Service (FESS) | [www.fess.ie](http://www.fess.ie) |
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| **MOOCs (Massive Online Open Courses)** | |
| Free access to online courses  Search regularly for new courses and new start dates | <https://www.mooc-list.com/> |
| <http://www.cmit.ie/> |
| [www.dbs.ie](http://www.dbs.ie) |
| <http://www.exceltraining.ie/> |
|  | <http://www.ecdl.org/programmes/index.jsp?p=2929&n=2951> |