MASTER COURSE OUTLINE

A. ACCT 1021 Excel™ Spreadsheet Applications

B. COURSE DESCRIPTION:

This course includes the use of Microsoft Excel™ for business and accounting applications, such as sales, payroll, inventory, and expense reports, as well as budgets and estimates. This class also prepares students for the Microsoft Excel™ Specialist and/or Expert Certifications. Students who have a current external certification which meet the objectives for this course may be granted course credit. Pre-requisite: Basic computer skills.
(3 Cr – 3 lect, 0 lab)

C. *Core Theme: Critical Thinking

D. RIVERLAND INSTITUTIONAL LEARNING OUTCOMES:

This course addresses the following Riverland Institutional Learning Outcome(s):
☒ ILO 1: critical thinking *(Core Theme Goal 2)*
☐ ILO 2: awareness of the larger global community *(Core Theme Goal 7 or 8)*
☐ ILO 3: ethical, engaged citizenship *(Core Theme Goal 9 or Goal 10)*
☐ ILO 4: communication and collaboration *(Discipline Goal 1 and by any learning outcome(s) involving communication or collaboration)*

E. MAJOR CONTENT AREAS:

- Basic Excel™ Worksheet Creation and Formatting
- Formulas and Functions for Analyzing Data
- Charts to Represent Data Visually
- Managing Large Sets of Data
- Pivot Tables and Pivot Charts
- Tools for What-If Analysis
- Advanced Date, Logical, Statistical and Financial Functions
- Data Management and Error Control
- Templates and Macros

F. GOAL TYPE, OBJECTIVES, AND OUTCOMES:

GOAL TYPE	**OBJECTIVES** **Students will be able to**	**OUTCOMES** **The student will successfully**
*Critical Thinking	gather factual information and apply it to a given problem in a manner that is relevant, clear, comprehensive, and conscious of possible bias in the information selected.	1. create and utilize spreadsheets as commonly used in an accounting and business environments. 2. identify and apply appropriate Excel™ formulas and functions.
CS	create and format a basic Excel™ worksheet.	1. enter/edit cell data. 2. create formula. 3. manage columns/rows. 4. select/move/copy/paste data. 5. apply cell styles, cell alignment, and font options. 6. apply number formats. 7. manage worksheets. 8. select page set-up options. 9. preview and print a worksheet.
CS	apply formulas and functions to calculate and analyze data.	1. use relative, absolute, and mixed cell references in formulas. 2. insert functions for basic math, statistics and dates. 3. use look-up, payment, and if functions.
CS	create charts and insert sparklines to represent data visually.	1. create line, bar, pie, combo and other types of charts. 2. add, edit and format chart titles, axis and data labels, and legends. 3. add gridlines, chart styles, and colors. 4. modify the data source. 5. insert and customize sparkline.
CS	manage and analyze large sets of data.	1. view/print large data sets using features such as freeze panes, page breaks, and print areas. 2. create/modify tables. 3. calculate data with structured references and table aggregation. 4. sort and filter data. 5. create and apply conditional formatting.
CS	manage and analyze data by creating subtotals, pivot tables, and pivot charts.	1. subtotal and group data. 2. create and modify pivot tables. 3. sort, filter and slice a pivot table. 4. create a calculated field. 5. change the pivot table design. 6. create a data model. 7. create a pivot chart.
CS	use decision-making tools for what-if analysis.	1. create, maintain, and use range names.

		2. create one- and two-variable data tables. 3. determine optimal input values using goal seek. 4. use scenario manager. 5. optimize results with solver.
CS	manipulate data using advanced date, logical, statistical, and financial functions.	1. use date and time functions. 2. use advanced logical functions such as switch, ifs including use of and, or, not. 3. use functions to evaluate single and multiple conditions, including countif(s), averageif(s), maxif(s), minif(s). 4. insert a map. 5. use advanced financial functions such as pv, fv, npv, rate. 6. create loan amortization schedule using ipmt and ppmt. 7. use cumulative financial functions such as cumipmt and cumprinc.
CS	exercise data management and error control in workbooks containing links and 3-D formulas.	1. work with grouped worksheets. 2. insert hyperlinks into worksheets. 3. hide/unhide worksheets and open, arrange, and split windows. 4. insert formula and functions with 3-D references, and consolidate data. 5. link workbooks. 6. audit formulas by setting up a watch window and using iferror. 7. create data validation rule and test the rule. 8. protect cells, worksheets, and workbook.
CS	design templates, inspect workbooks, and create macros.	1. select existing templates as well as creating new templates. 2. use document inspector, accessibility checker and check compatibility. 3. add/edit notes, comments, annotations. 4. create macros using macro recorder, run macros, create macro button.

F. SPECIAL INFORMATION:

This course may require use of the Internet, the submission of electronically prepared documents and the use of a course management software program. Students who have a

disability and need accommodations should contact Accessibility Services at the beginning of the semester. This information will be made available in alternative format, such as Braille, large print, or current media, upon request.

G. COURSE CODING INFORMATION:

Course Code D/Class Maximum 30; Letter Grade

Revision date: 02/27/18; 01/20/26
AASC Approval date: 03/06/18; 03/17/26

*These five MnTC Goals have been identified as Riverland Community College Core Themes. Every course in the Riverland Community College curriculum shall meet outcomes from one of these themes.
**These five MnTC Goals have been identified as Riverland Community College Disciplines. Riverland's MnTC courses also shall meet outcomes from a Discipline Area.

NOTE: The Minnesota Transfer Curriculum "10 Goal Areas of Emphasis" are reflected in the five required discipline areas and five core themes noted in the Riverland Community College program of study guide and/or college catalog.

***Riverland Community College Core Themes**	**MnTC Goal Number**
Critical Thinking (CT)	**2**
Human Diversity (HD)	**7A, 7B, 7A/B**
Global Perspective (GP)	**8**
Ethical and Civic Responsibility (EC)	**9**
People and the Environment (PE)	**10**

****Riverland Community College Discipline Areas**	**MnTC Goal Number**
Communication (CM)	**1**
Natural Sciences (NS)	**3**
Mathematics/Logical Reasoning (MA)	**4**
History and the Social & Behavioral Sciences (SS)	**5**
Humanities and Fine Arts (HU)	**6**