Spreadsheet Programming for Business

CSE 1113

Description / Conditions

Transcript Abbreviation:
Spreadsheet Progrg

Course Description:
Spreadsheet modeling/programming concepts and techniques to solve business related problems; efficient/effective data handling, computational analysis and decision support.

Course Levels:
Undegraduate (1000-5000 level)

Designation:
Elective

General Education Course:
(N/A)

Cross-Listings:
(N/A)

Course Detail

Credit Hours (Minimum if “Range” selected):
1.00

Max Credit Hours:
1.00

Select if Repeatable:
Off
Maximum Repeatable Credits:
(N/A)

Total Completions Allowed:
(N/A)

Allow Multiple Enrollments in Term:
No

Course Length:
7 weeks (autumn or spring)
14 weeks (autumn or spring)
12 weeks (summer only)

Off Campus:
Never

Campus Location:
Newark
Marion
Mansfield
Lima
Columbus

Instruction Modes:
In Person (75-100% campus; 0-24% online)

Prerequisites and Co-requisites:
Prereq: Math 1130 (130) or above.

Electronically Enforced:
No

Exclusions:
Not open to students with credit for 1111 (101), 1112 (105), 2111, or 200.

Course Goals and Learning Objectives
Course Goals / Objectives:
Be competent with programming spreadsheets by appropriately using simple and nested functions, including logical and numerical functions, basic statistical functions, time and date functions, and table lookup functions.
Be competent with designing/engineering spreadsheets to minimize errors in construction and modification, including appropriately using relative/absolute cell referencing.
Be competent with aggregating and summarizing multivariate data sets, including both numerical and categorical variables.
Be competent with importing into spreadsheets from large data sets in text format and with more than one data source.
Be competent with applying sound spreadsheet engineering principles in business contexts such as pro forma income and balance sheets, basic analysis of large data sets, and fundamental computations for financial, marketing, and operational analysis.
Be competent with using spreadsheets to effectively communicate their purpose and process, both on the computer and on paper.
Be competent with using spreadsheets to effectively communicate results using appropriate numerical and graphical tools.

Check if concurrence sought:
No

Contact Hours
### Contact Hours:

<table>
<thead>
<tr>
<th>Topic</th>
<th>LEC</th>
<th>REC out-of-class</th>
<th>REC in-class</th>
<th>Weekly LAB out-of-class</th>
<th>Weekly LAB in-class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course intro &amp; spreadsheet basics - entering/editing data, formatting, filling a series</td>
<td>1.0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
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<tr>
<td>Writing formulas, order of precedence, precision vs. display, Relative/absolute referencing</td>
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<td>0.0</td>
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<td>0.0</td>
<td>0</td>
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<tr>
<td>Using functions: simple - SUM, MIN, MAX, COUNT, COUNTA, STD.DEV., MEDIAN, MODE,</td>
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<td>0.0</td>
<td>0</td>
<td>0.0</td>
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<tr>
<td>Functions requiring multiple arguments: ROUND, COUNTIF, SUMIF, LARGE, SMALL, RANK, SUMPRODUCT, PERCENTILE, QUARTILE</td>
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<tr>
<td>Using multiple worksheets, working with large spreadsheets (split screen, freeze panes, What-if Analysis &amp; Goal Seek)</td>
<td>1.0</td>
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<tr>
<td>Date/Time Functions</td>
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<tr>
<td>Boolean logic: Relational Operators, AND, OR, NOT functions</td>
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<tr>
<td>IF functions</td>
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<tr>
<td>Reference Functions (vlookup, hlookup)</td>
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<tr>
<td>Solving Larger Problems - Nesting formulas &amp; Modeling Spreadsheet Solutions</td>
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<td>0.0</td>
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<tr>
<td>Formula Auditing, Evaluate Formula tool, Calculation Options &amp; other error checking</td>
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<tr>
<td>Database Concepts - Using Excel as a database: sort, filter, Subtotals, Data Tables, Pivot Tables</td>
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<td>LEC</td>
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<tr>
<td>Importing &amp; Exporting Data (csv), Embedding &amp; Linking data, transposing data, Inserting symbols, Scenario Manager, Data Analysis Tools, Macros (other features)</td>
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**Grading and Texts**

**Grading Plan:**
Letter Grade

**Course Components:**
Lecture

**Grade Roster Component:**
Lecture

**Credit by Exam (EM):**
Yes

**Grades Breakdown:**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Spreadsheet programming lab assignments (done out of class)</td>
<td>20%</td>
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<tr>
<td>Midterm</td>
<td>30%</td>
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<tr>
<td>Final</td>
<td>50%</td>
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**Representative Textbooks and Other Course Materials:**

<table>
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<tr>
<th>Title</th>
<th>Author</th>
<th>Year</th>
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<tbody>
<tr>
<td>Course notes, Custom text</td>
<td>D. Gross</td>
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</table>
ABET Student Learning Outcomes

ABET-CAC Criterion 3 Outcomes:
(N/A)

ABET-ETEC Criterion 3 Outcomes:
(N/A)

ABET-EAC Criterion 3 Outcomes:
(N/A)

Embedded Literacies (UG courses only)

Embedded Literacies Info:

Attachments / Additional Notes or Comments

Attachments:
(N/A)

Additional Notes or Comments:
(N/A)