

**Economics and Business Department  
Hendrix College  
Assessment Report (Revision of 2017 Assessment Report)  
August 2018**

**Relevant Departmental Learning Goal:**

In fulfilling the requirements for a degree from the Economics and Business Department, students:

- Employ discipline specific tools of critical analysis and problem solving.

**Background:**

Several years ago, mathematics professors observed a large number of Econ/Bus majors in their MATH 120 Functions and Models courses were seniors. They asked us how that math requirement for our majors was beneficial to them if they wait until their senior year to take it. We decided to make the math requirement to be either a pre-requisite or co-requisite for ECON 200 Microeconomic Theory and ECON 210 Macroeconomic Theory, the entry-level course sequence in economics for our majors.

In 2016, we changed the math requirement to be a pre-requisite for ECON 200 and ECON 210 (removing the co-requisite option) to ensure our students have a solid foundation of mathematics before starting their economics sequence.

Microeconomic Theory and Macroeconomic Theory demand appropriate foundational skills in mathematical analysis in order for most students to be able to focus on the economic concepts as opposed to struggling with understanding graphs, functions, and equations. Previous experiences have shown that students who have not taken MATH 120 Functions and Models or MATH 130 Calculus I, and even those who are enrolled in one of those courses concurrently with ECON 200 or ECON 210, are often challenged because they do not have an appropriate background in mathematics when entering the course.

**Action Plan:**

Working with Professor Lars Seme in the Hendrix College math department, economics faculty members will provide analyses of student performance based on whether students have taken MATH 120 or MATH 130 previously, concurrently, or have not taken any math course at Hendrix. Analysis will be based on data obtained by Professor Seme from the registrar's office for years 2004-2013. The data set includes information regarding students' math and English ACT scores, the 100- and 200-level courses students were enrolled in, and student performance.

**Assessment Criteria:**

**Direct Assessment:**

Analyses will focus on determining the comparative relationship between performance in ECON 200 and ECON 210 for those who have taken MATH 120 or MATH 130 before

the economics course and those who are taking math concurrently.

**Indirect Assessment:**

A question will be added to our annual Senior Survey asking seniors to self-assess their preparedness mathematically for their economics classes.

**Future Steps:**

Based on the results of the analysis, the economics and math faculty will work together to identify ways that MATH 120 or MATH 130 can offer the greatest benefit for students who expect to continue quantitative work in future coursework and careers. In addition, there may be future requests to the Registrar for current data to measure the impact of the change in listing MATH 120 and MATH 130 as a pre-requisite course.

**Economics and Business Department  
Hendrix College  
Assessment Report  
August 2018**

**Relevant Departmental Learning Goal:**

In fulfilling the requirements for a degree from the Economics and Business Department, students:

- Learn technology skills appropriate for use in economic and business analysis.

**Background:**

Microsoft Excel is one of the most widely used technologies in businesses today. Excel has the ability to store and manipulate data, organize and analyze it, and communicate results through lists, tables, graphs, and reports. During interviews of our students, prospective employers ask about their level of knowledge in Excel. When our graduates come back to speak at alumni panels, roundtables, and workshops, they tell our current students to learn as much Excel as possible because they will use it extensively in all types of jobs.

At the 2018 Arkansas Society of CPAs Educator's Conference, the Employer Panel could not emphasize enough the need for our students to know Excel extensively. Although new employees can learn some of the specific functions and processes on the job, those with a stronger foundation will advance more quickly and be more effective with that technology skill.

Several years ago when the CPA exam moved from being a paper exam to a computerized exam, analysis and communication of information in spreadsheet form became a requirement. In 2018, specific Excel functions were added to the exam spreadsheet tool.

Because of its ease of learning, versatility, and ability to help with problem solving, we have used Excel extensively in many of our courses. We are taking the opportunity this year to assess the effectiveness of our efforts in accomplishing this learning goal.

**Action Plan:**

Each professor will prepare a statement of how Excel is used or required in each of their courses. We will compare what we cover in our classes to those processes and functions recommended by graduates and employers to ensure our students are mastering the proper processes and functions. The list of courses and how Excel is used in them is presented at the end of this document.

**Assessment Criteria:**

Direct Assessment:

In the appropriate courses and for the appropriate assignments, students will complete

problems using specific processes and functions in Excel. The professors will evaluate how well the students understand and use Excel for analysis, problem solving, and communication.

In our capstone courses, BUSI 497 Corporate Strategy and ECON 497 Economic Research, students will be graded on their use of Excel in organizing data, analyzing it, and communicating the results in effective manners.

**Indirect Assessment:**

A question will be added to our annual Senior Survey asking seniors to self-assess their level of knowledge of using Excel.

**Future Steps:**

A rubric of Excel processes and functions is being developed by our department. It will ultimately be mapped onto our list of courses to ensure our majors are being exposed to a sufficient level of knowledge of Excel.

**Current Course List and Uses of Excel:**

<b>Course # and Title</b>	<b>Uses of Excel</b>
ECON 100 Survey of Economic Issues	None
ECON 200 Microeconomic Theory	None
ECON 210 Macroeconomic Theory	Brief coverage of Excel's present value functions.
ECON 300 Advanced Microeconomic Theory	None
ECON 310 Advanced Macroeconomic Theory	None
ECON 320 Money, Banking, and Credit	None
ECON 340 Environmental Economics	I have not specifically tasked students with using Excel, but some have opted to use it within economic analyses provided in writing assignments.
ECON 360 International Economics	None
ECON 380 Public Finance	There may be a homework assignment where they could use it, but it isn't required.

ECON 385 Labor Economics	They have to do many assignments where they get data from the Bureau of Labor Statistics or similar website and answer questions about it. Most use Excel to present their data, but I could easily require it. They also have to do a paper in which they present data and discuss it. The vast majority use Excel to do this, and I could easily require it here as well.
ECON 400 Econometrics and Forecasting	Students are tasked with collecting, organizing, and presenting data using Excel. Some students choose Excel for their deeper analysis, but most use R.
ECON 410 Corporate Finance	Excel processes and functions are heavily demonstrated and required in this course. Students are required to solve many homework problems using Excel. Many financial and statistical functions are presented in class to be used on assignments. Advanced graphing techniques are required.
ECON 430 Management Science	The section on Monte Carlo Simulation is presented in Excel. Student assignments use statistical and other functions for required homework.
ECON 497 Economic Research	Students are tasked with collecting, organizing, analysis, and presenting data using Excel.
ECON 500 Econometrics and Forecasting	Students are tasked with collecting, organizing, and presenting data using Excel. Some students choose Excel for their deeper analysis, but most use R.
ECON 530 Management Science	The section on Monte Carlo Simulation is presented in Excel. Student assignments use statistical and other functions for required homework.
ECON 550 Managerial Economics	We use the data analysis toolpak to do regression analysis. They practice this on homework and have to interpret the output on an exam.
ECON 590 Economic Research	Students are tasked with collecting, organizing, analysis, and presenting data using Excel.
BUSI 100 Contemporary Issues in Business & Entrepreneurship	Optional use of Excel for budgets and financial statement projections.

BUSI 110 Personal Finance	Mention the many uses of Excel such as calculating PV, FV, monthly payments, debt amortization tables, etc., but do not show students how to perform calculations in Excel nor require it.
BUSI 200 Principles of Accounting I	Demonstration of basic Excel functions to prepare trial balances, adjusting entries, and closing entries. No assignments are required to use Excel.
BUSI 210 Principles of Accounting II	Financial statement analysis project - The project includes a common-sized Income Statement and Balance Sheet as well as a horizontal analysis presented through a bar graph. Statement of Cash Flows Project - students must prepare in Excel a Statement of Cash Flows using an IS and BS provided to them. Use of formulas and links to different tabs is required. Formatting and presentation style is also a portion of the overall grade.
BUSI 250 Principles of Statistics	Extensive use of Excel is required in this course. All types of data collection and organization techniques are covered. All descriptive statistics are covered. Regression and ANOVA are required. Extensive use of graphing techniques are required.
BUSI 260 Non-Profit Management	Excel is used to demonstrate budgeting and financial statement analysis. Some homework assignments are required in Excel.
BUSI 261 Sports Management	Excel is used to demonstrate budgeting and financial statement analysis. Some homework assignments are required in Excel.
BUSI 262 Arts Management	Excel is used to demonstrate budgeting and financial statement analysis. Some homework assignments are required in Excel.
BUSI 300 Intermediate Accounting I	Require "Learning Excel" project outside of class that uses the 2016 Excel Tutorial from GCFLearnFree.Org. During the project, the students watch videos and then perform practice exercises in Excel. These videos and exercises cover everything from the basics of saving a file in Excel and how worksheets are set up to more advanced topics such as pivot tables and conditional formatting.

BUSI 310 Intermediate Accounting II	Financial Statement Preparation Project - students are given a trial balance in Excel and asked to create a Balance Sheet and Income Statement. They are required to assign categories to each account code and use =SumIf function to build the IS and BS.
BUSI 320 Taxation for Individuals	None
BUSI 330 Cost Accounting	Moderately heavy use of Excel is required for data analysis for budgeting, cost function development, and capital budgeting. Some graphing is required.
BUSI 350 Business Law	None
BUSI 370 Auditing	None
BUSI 390 Accounting Information Systems and Database Management	Use of advanced Excel functions is presented at the beginning of the course with required homework using them. Excel is used to organize data before importing it into a database.
BUSI 410 Advanced Cost Accounting	Several projects require the use of Excel for data organization, analysis, and communication: comprehensive budget, cost functions, analysis of simulation data, etc.
BUSI 497 Corporate Strategy	Students have the option to use Excel for case study analysis and class presentations. In the future, will require Excel for ratio analysis and analytical tools appropriate for individual cases.
BUSI 500 Taxation for Business Entities	None
BUSI 510 Advanced Cost Accounting	Several projects require the use of Excel for data organization, analysis, and communication: comprehensive budget, cost functions, analysis of simulation data, etc.

BUSI 520 Seminar in Advanced Accounting	<p>Require 2-4 Excel homework assignments. These assignments reinforce basic excel skills such as basic formulas, cell referencing, formatting, etc. I put a lot of emphasis on formatting so that they understand what a professional work paper that would be shared with a client or given to a boss should look like.</p> <p>A student group presents on "Excel Most Knows".</p> <p>Through collaboration between myself and the students, we identify around 5 Excel functions/tools that we feel are imperative for any student with a Masters of Accounting degree should hopefully know how to perform (or at least be aware that Excel can do). In the past these functions/tools have been covered Pivot Tables, Text to Columns, VLookUp, Conditional Formatting and advanced Filtering/Sorting.</p>
BUSI 530 Governmental and Non-Profit Accounting	All homework is Excel-based using the Excel problems and templates from the textbook. These assignments reinforce basic Excel skills such as basic formulas, cell referencing, formatting, etc. I put a lot of emphasis on using Excel to help check your work (such as building check figures into the balance sheet and cash flows) as well as using Excel efficiently.
BUSI 550 Business Law	None
BUSI 570 Auditing	None
BUSI 580 Advanced Auditing	None
BUSI 585 Forensic Accounting and Fraud Examination	None
BUSI 590 Accounting Information Systems and Database Management	Use of advanced Excel functions is presented at the beginning of the course with required homework using them. Excel is used to organize data before importing it into a database.