



Excel 2 (Advanced)

PUB AFRS 6514

Autumn 2018

Wednesdays 5:45 – 7:35 pm

Page Hall 040

Credit hours: 1

Professor: Kim Young, PhD

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Office Hours: Wednesdays 2:30-4:30 pm, and by appointment; Page Hall 310B

Course Materials

Optional Textbook

Walkenbach, John (2015). Excel 2016 Bible. Wiley. ISBN: 978-1-119-06751-1.

This book is available electronically from OSU Library.

All other course materials will be provided through Carmen.

Students can access textbook information via the Barnes & Noble bookstore website: www.shopOhioState.com as well as from their BuckeyeLink Student Center. This information is disseminated by B&N to all area bookstores. You may buy from a store of your choice and/or shop for books (always use ISBN# for searches) on line.

Course Description

Overview Businesses, governments, schools, alumni clubs, political organizations, charities, healthcare institutions, and virtually every other type of organization, are collecting/creating vast amounts of data. Many different tools are available for managing, tracking, and analyzing these data to provide meaningful results. Microsoft Excel has become a primary tool for keeping simple lists, tracking information, managing complex analyses of data, and creating efficient and effective reports.

Excel is an extremely powerful program. It is important to understand the benefits as well as the challenges of Excel and to learn how to use this tool effectively. For instance, Excel can save valuable time and produce novel insights but it is possible to accidentally introduce errors into formulas and unintentionally corrupt data.

PA 6513 is the first of two Excel skills courses. PA 6513 focuses on how to use Microsoft Excel for basic data entry, formatting, filtering and sorting, basic functions, formulas, nested formulas, and basic charts and graphs.

PA 6514 is the second course in the Excel skills series. This course focuses on how to use intermediate to advanced Microsoft Excel functionality to create nested formulas and conduct data analysis through the use of pivot tables and interactive worksheets. The class will be a mix of lecture/discussion and hands on work with Excel. The hands on work will be lab-style activities involving independent completion. Real world examples are used to provide context.

Who Should Take the Class? Students should take this course if they have taken the Basic Excel class (PA 6513) during the 1st session and/or have an understanding of how to use formulas, create basic graphics, and navigate the Excel menus. If you have questions, please contact the instructor.

Student Learning Objectives Upon successful completion of this course, students will have:

- Gained an understanding of the advanced functionality of Microsoft Excel
- Utilized Excel to manage and analyze data
- Applied advanced skills to manipulate and create complex spreadsheets in Excel
- Utilized Excel to support decision making and communicate with decision makers

Course Requirements The following components make up the final course grade:

Advanced Formula Exercise:	15% OR 0%
Formula Management Exercise:	15% OR 30%
Table/Pivot Exercise:	20%
Final Project Progress:	10%
Final Excel Project:	40%

The Advanced Formula Exercise is an optional exercise. If submitted, it is worth 15% of the final course grade and the Formula Management Exercise is then worth 15% of the final grade. If the Advanced Formula Exercise is **not** submitted, the Formula Management Exercise will be worth 30% of the course grade. Any Advanced Formula Exercise submission will be graded and will count toward the course grade. *If you do not want this exercise to count toward your course grade, do not submit it to Carmen.*

Transformation of numerical grade to a letter grade will be according to the schedule below:

A	93-100	B-	80-82	D+	68-69
A-	90-92	C+	78-79	D	60-67
B+	88-89	C	73-77	E	<60
B	83-87	C-	70-72		

A Note about Class Contribution Class engagement is critical to making this course as valuable (and as interesting!) as possible for you and your fellow students. Sharing about your prep before class and gaining familiarity with the lab data and content enables in-class contributions. Participating during in-class conversations regarding those readings, asking questions, clarifying assignments, participating in the lab portion of the class, and sharing personal and professional experiences that can aid the class during discussions are all valuable contributions.

Course Exercises / Projects

Exercise 1: Advanced Formula Exercise For this exercise, you will use a dataset uploaded to Carmen to analyze data and create new fields using various advanced formulas.

- Formula creation will be based on prompts in the dataset and must include formulas with two or more functions comprising the formula.
- Grading is based on formula accuracy. Partial credit will be given if portions of the formula are correct.

Completed worksheets should contain the dataset, formulas you created, and explanations (if necessary).

Exercise 1 will be due to the Carmen Dropbox by 11:59PM on Thursday, November 1st.

Final Project Progress Report For the final project, you will select a topic and find a dataset to work on throughout the term. For the project progress report, please identify the topic you have selected and provide at least one dataset for that topic. You must have the data in hand. Identifying the source of the data or requesting but waiting on the data will not count as sufficient progress. Include a brief outline of what you plan to do with the data for your final project. For example, you could provide a dataset of airline departures from Port Columbus and outline what type of information you want to report, such as on-time departures during heavy snowfall in leap years.

This progress report will be due to the Carmen Dropbox by 11:59pm on Thursday, November 8th.

Exercise 2: Formula Management Exercise Building on the skills you already have, combined with those skills we have developed thus far in the class, you will use a dataset uploaded to Carmen to show some formula management techniques. These will include:

- Create defined Names and use those names in a formula.
- Fix formulas that have errors and include a **brief** description of how you fixed those errors (how did you find the error, what tools did you use in Excel, etc.)

Exercise 2 will be due to the Carmen Dropbox by 5:30PM on Thursday, November 15th.

Exercise 3: Table / Pivot Exercise Utilizing techniques learned in class and a dataset provided, create tables and pivots and utilize them with formulas.

- Create tables
- Create formulas to answer questions provided. Formulas must use reference tables by table name and field names
- Create pivot tables & use them to answer questions provided. Explain what the pivot tables are showing

Exercise 2 will be due to the Carmen Dropbox by 11:59PM on Thursday, November 29th.

Final Project Using dataset(s) of your choosing, create a **one page** report that includes the following sections:

- Overview and inclusion of the original dataset (data source, questions posed)
- Data Preparation (what you did with the data to make it usable for your analysis).
- Data Analysis: for each item below, briefly explain what the component is showing. Be sure to include why that information is important - link it to the question(s) posed.
 - 3 unique columns added to the dataset (using formulas)
 - 2 standalone formulas (made up of at least 2 functions)
 - 2 unique pivot tables
 - 2 unique graphs
- Key Findings: summarize key findings. These should relate to the questions posed, answering them directly.
- Conclusion: provide a short paragraph summarizing the entire report.

Notes: You should be creative, but remember that the objective is to create something a senior manager would recognize as professional and valuable. These people are busy! Be direct, clear, and succinct.

The final project is worth 40 points. Points will be distributed as follows:

- Overview and Data Preparation: 8 points
- Data Analysis: 10 points
- Key Findings: 10 points
- Conclusion: 5 points
- Visual appeal, text flow and grammar: 7 points

The Final Project is due to the Carmen Dropbox by 11:59pm on Tuesday, December 11th.

Course Policies

Assignment Submission All assignments should be submitted through Carmen by the day/time they are due. Informing the instructor of your intention to be absent does not waive your obligation to submit assigned work on time. **Late work will be accepted with a one-third-letter grade penalty each day that it is late (A- to B+), unless prior approval is granted by the instructor.**

Assignments that are late by 7+ days will not be graded.

Grade Appeals Grades on assignments are intended to reflect the overall quality of performance of the student. You may appeal your grade on an assignment if you think the grade does not reflect the quality of your performance on the assignment. To appeal a grade, submit a clear written explanation via email describing why you believe the assigned grade is inappropriate. **The appeal must be submitted within one (1) week after your work is returned.** Each appeal will be considered, and if a re-grade is performed, the entire assignment will be re-graded. The final grade may be greater, less, or equal to the original grade. I will carefully consider all grade appeals.

Academic Integrity

From: <http://oaa.osu.edu/coamfaq.html#academicmisconductstatement>;

“The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University’s [Code of Student Conduct](#) and that all students will complete all academic and scholarly assignments with fairness and honesty. Failure to follow the rules and guidelines established in the University’s Code of Student Conduct may constitute “Academic Misconduct.” Sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.”

“In the Ohio State University’s [Code of Student Conduct](#), Section 3335-23-04 defines academic misconduct as: “Any activity that tends to compromise the academic integrity of the University, or subvert the educational process.” Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University’s [Code of Student Conduct](#) is never considered an “excuse” for academic misconduct.”

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Other sources of information on academic misconduct (integrity) to which you can refer include:

The Committee on Academic Misconduct web page: <http://oaa.osu.edu/coam.html>

Ten Suggestions for Preserving Academic Integrity: <http://oaa.osu.edu/coamtensuggestions.html>

Eight Cardinal Rules of Academic Integrity: www.northwestern.edu/uacc/8cards.html

All work must be original and be your own. For the purposes of this class, **you may not collaborate or otherwise work together on any assignments or projects.** You may ask each other general questions to clarify concepts and ideas, but these questions may not pertain directly to how to complete assignments.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Workload Expectations

For each credit, there should be about an hour of in class meeting time and 2 hours out of class work per week. For a half-semester, one-credit class you can expect an average of 4 hours of work outside of class each week completing readings, assignments and preparing for exams.

Glenn College Diversity Values Statement

The Glenn College is committed to nurturing a diverse and inclusive environment for our students, faculty, staff, and guests that celebrates the fundamental value and dignity of everyone by recognizing differences and supporting individuality. We are dedicated to creating a safe space and promoting civil discourse that acknowledges and embraces diverse perspectives on issues and challenges that affect our community.

Accommodation Policy

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>

Additional Resources

As a student, you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce your ability to participate in daily activities. OSU offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know is

suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the **Office of Student Life Counseling and Consultation Services** [Additional resources continued] (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 4th Floor of the PAES Building. Twenty-four hour emergency help is also available through the National 24/7 Prevention Hotline at 1-800-273-TALK or at suicidepreventionlifeline.org.

Course Schedule

Week 1: October 17

Topics: Introduction to the course (overview of syllabus, course requirements); Review Formulas and Functions

Week 2: October 24

Topics: Advanced formulas (continued); Formula Management

Week 3: October 31

Topics: Formula Management (continued); Data Validation

Due: Exercise 1 by 11:59 pm Thursday, November 1st

Week 4: November 7

Topics: PivotTables to Summarize Data; How to use Tables to Organize Data

Due: Final Project Progress Report by 11:59 pm Thursday, November 8th

Week 5: November 14

Topics: Tables and PivotTables (continued)

Due: Exercise 2 by 11:59 pm Thursday, November 15th

Week 6: November 21 – **NO CLASS (Thanksgiving Break)**

Topics: Review / Catch up / Work on Final Project

Week 7: November 28

Topics: Data Analysis in Excel

Due: Exercise 3 by 11:59 pm Thursday, November 29th

Week 8: December 4

Topics: Data Analysis (continued)

Finals Week: December 11

Due: Final Project – Due by Tuesday December 11th @ 11:59 pm

Summary of Course Schedule

Week	Date	Topic	Due
1	10/17	Welcome; Course Overview; Review Formulas & Functions	
2	10/24	Advanced Formulas; Formula Management	
3	10/31	Formula Management; Data Validation	Exercise 1 (11/1)
4	11/7	External Resources; Tables; PivotTables	Final Project Progress (11/8)
5	11/14	Pivot Tables continued	Exercise 2 (11/15)
6	11/21	NO CLASS (Review/Catch up/Work on Final Project)	
7	11/28	Data Analysis	Exercise 3 (11/29)
8	12/5	Data Analysis/Work on Final Project	
	12/11	Final Project Due by 11:59 pm Tuesday December 11 th	Final Project (12/11)

IMPORTANT NOTE: Use Excel Data Filter to check your work. **Do not** sort the data unless explicitly told to do so.