

**WESTERN KENTUCKY UNIVERSITY**  
**Gordon Ford College of Business**

**BDAN 305 (Data Modeling and Analysis)**  
**Course Syllabus**

**Dr. Tong Wu**

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Course Website: <https://blackboard.wku.edu>

***Office Hours***

All by appointment but my hours are very flexible.

**The best method of reaching me is via email.**

\*I typically respond to email within a few hours, Monday-Friday. I will do my best to answer your emails, even if it is on the weekend or last minute on due dates.

**COURSE OBJECTIVES**

This course is designed to provide students of any discipline with a working knowledge of how spreadsheet skills and modeling are useful as one component of information systems and basic data analytics. Because this course is required for all Data Analytics majors and most certificate seekers, it is focused on primarily a business student audience. Prior coursework assumed is CIS141 or other approved equivalents.

Upon completion of this course, the student should be familiar with the following topics:

**Skill Objectives**

1. The student should be able to apply basic to intermediate spreadsheet skills to business scenarios using spreadsheets.
2. The student should be able to demonstrate a basic understanding of data analytics concepts using spreadsheets.

Skills learned include, but are not limited to,

1. Relative vs absolute cell referencing,
2. The use of formulas and built-in functions,
3. Charting and basic visualization techniques,
4. Pivot tables,
5. Macros and VBA,
6. What-if analysis tools

This course has been structured with a weekly schedule that allows students to complete an average of one week's activities per week. To ensure a successful learning experience, please complete all the learning activities for each week in the order they are listed. Also, it is important that you complete each week's activities in order and do not skip ahead without finishing the current week. For example, you should complete all the learning activities in Week 01 before beginning any learning activities in Week 02.

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**COURSE MATERIALS**

**Big Red Backpack:** The Big Red Backpack program is the title of WKU's partnership with Barnes & Noble College for their First Day Complete initiative. Big Red Backpack is a course materials delivery program that ensures students have their required course materials on the first day of class and may reduce the costs of materials for many of their courses. Enrollment in the program occurs automatically when students register for classes. Students may opt out of the program each semester, as long as they choose to opt out for all of their classes. Students MUST carefully and completely follow all instructions regarding the Big Red Backpack Program. Those instructions will be provided by:

1. An email to all Topper email addresses from the Big Red Backpack Program one month prior to the start of classes.
2. The Big Red Backpack Program site:  
<https://www.wku.edu/bigredbackpack/>.

Students should refer to the Big Red Backpack Program site referenced above for opt-out deadlines and any additional details.

**Other Requirements:**

- Regular access to a computer with high-speed Internet
- *A Windows-based computer recommended (Mac's are usually okay, but some assignments may require a Windows PC).*
- **Microsoft Office latest edition.**

**Recommendations:**  
**(Optional)**

- Cloud storage and/or USB Storage Device (e.g. WKU My Files)

**ASSURANCE OF LEARNING**

**Critical Thinking** - We will focus on demonstrating the ability to solve problems through critical, reflective, and integrative thinking through projects and simulation activities. Specifically, you should be able to: (1) identify various approaches to defining business problems, (2) recognize the impact of various influences on potential solutions to business problems, (3) identify alternative solutions to business problems, and (4) demonstrate the ability to make sound decisions based on data-driven evaluation.

**Student Use of Technology** - We will focus on demonstrating the ability to strategically employ information technology. Competency in current technology encompasses the ability to use information technology when undertaking business decisions. The specific skills include: (1) collecting and analyzing data using spreadsheets, (2) business problem modeling using spreadsheets, and (3) understanding the purpose and concepts of data analytics.

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**GRADING AND EVALUATION PROCEDURES**

Assignment	Number	Points Each	Total Points
Conceptual Assignments	9	10	90
Chapter Guided Projects	12	30	360
Chapter Capstone Independent Projects	4	50	200
Analytics Projects	3	50	150
Final Project	1	100	100
Exam	1	100	100
<b>Total</b>			<b>1000</b>

**A: >=900**

**B: 800-899**

**C: 700-799**

**D: 600-699**

**F: <600**

**Spreadsheet – Lessons & Projects:**

This course will use **MyLab IT** which will be supplied for this term on day one of the semester.

**Analytics Projects**

This course also requires the completion of several analytics assignments. It is impossible to earn an A in this course without the completion of these assignments. They are discussed in class and on Blackboard, additionally, course videos may be available to assist in this work.

**Exams**

***Final Exam:*** This is an open-book, open-resources exam. While you are welcome to use any materials or resources that you have access to, please note that you may not use other students or your professor as a resource during the exam.

**Grading**

Grades will be based on a weighted percentage of the total number of points you may earn from major exams, assignments, and completion of any other learning activities assigned by the instructor. You can find information in your blackboard grade book on the different weighted grading categories and their percentages. You may check your progress in the course at any time by accessing the grade book.

**AI Usage:**

In this class you are free to use generative artificial intelligence (AI) tools such as (list relevant examples) on assignments and activities in this course. If you chose to utilize AI, you will be expected to properly document and cite this information. Examples of citing AI are available at: <https://libguides.wku.edu/stylewrite/ai>.

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## **Course Policies:**

### **Classrooms**

Class attendance is expected, as lab sessions provide valuable time to complete weekly assignments. Please avoid arriving late or leaving early, as this can be disruptive to other students. No food or drinks are permitted in the computer lab. Mutual respect is essential in my courses; any form of harassment will not be tolerated.

### **Course Schedule**

The ending date for an assignment implies 11:59 PM CT. Be aware that the course schedule is tentative and subject to change at the discretion of the professor. Refer regularly to the electronic schedule posted on Blackboard.

### **Due Dates and Assignment Availability**

Please pay attention to all due dates/times on the Bb class calendar and plan accordingly. Unless you are granted an extension, late submission will be penalized. Late submission will be accepted for only one week after the due date. However, it will be reduced by 5% of the total points earned/day.

### **Academic Honesty**

Honesty in all you do for this course (and in life) is assumed and expected. No form of academic dishonesty (cheating, copying assignments, plagiarism, forgery, etc.) will be tolerated. The first offense, regardless of whether you provide your work to another or you copy the work from another is an automatic F for the class. This is not to be construed as a complete list; should a student be unsure of whether a planned activity is within course policy, ask in advance.

*The MyLab IT software tool is armed with a cheating detection algorithm that flags any file submitted that is not an individual's original download and work.*

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**ADA Accommodations-Title IX/ Discrimination & Harassment-  
WKU Counseling and Testing Center**

[Please use this link for the most current information](#)

**Email and Blackboard as Official Means of Communication**

**Each student must have a WKU email address and Blackboard account for class participation.** *Email and Blackboard are considered official communication tools of this class. Thus, announcements and reminders are posted/sent frequently and will be sent only to official WKU email addresses. If you use a different email package at home, please ensure that your WKU email is forwarded correctly. It is your responsibility to check WKU email and Blackboard regularly and to be aware of all class reminders and announcements.*

**Additional Course Policies**

1. The professor reserves the right to make ANNOUNCED changes to the syllabus or schedule as necessary; it is your responsibility to be aware of these changes. **Last minute and retroactive changes that negatively impact students will never be made.**
2. Grades will be posted promptly on Blackboard after each assignment or assessment has been completed. Any grade may be contested for **only 5 business days** after it is posted.
3. It is your responsibility to be familiar with the academic calendar as posted on the WKU website [https://www.wku.edu/registrar/academic\\_calendars/](https://www.wku.edu/registrar/academic_calendars/)
4. Exceptions will not be made regarding late adds, drops, or final exam conflicts.
5. Incompletes and deadline extensions will **not** be allowed in this course except in emergencies.
6. Schedule exceptions are **not** allowed under any circumstances.
7. Problems with Blackboard should immediately be reported to Information Technology Services on (270)745-7000.
8. Beginning in Fall 2024, the Gordon Ford College of Business is moving to a “bring your own device” model. All students are required to have a laptop for coursework ([Computer Device Requirements https://www.wku.edu/business/computer-requirements.php](https://www.wku.edu/business/computer-requirements.php)).