



Master Course Syllabus

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: <https://catalog.uvu.edu/>

Semester: Spring

Course Prefix: 38174

Course Title: HR Analytics

Year: 2025

Course and Section #: HR 4060-X01

Credits: 3

Course Description

This is a workforce analytics course that explores key metrics, analysis, interpretation and communication tools necessary in developing comprehensive human capital strategies. After completing this course, students will be able to identify, analyze and interpret data to make human resource recommendations for individuals and organizations. The course includes exploration of data analysis and presentation skills for human capital research and decision-making for planning, employee selection, compensation, employee survey data, organizational effectiveness and utilization analysis. Special emphasis is placed on developing written, verbal and electronic communication skills.

Course Attributes

This course has the following attributes:

- General Education Requirements
- Global/Intercultural Graduation Requirements
- Writing Enriched Graduation Requirements
- Discipline Core Requirements in Program
- Elective Core Requirements in Program
- Open Elective

Other: *Click here to enter text.*

Instructor Information

Instructor Name: Silvia Clark, Ph.D.

Student Learning Outcomes

Upon successful completion of this course, students will be able to:

- Use core HR analytical concepts to develop robust data-driven solutions for human resource management problems.
- Research current trends in workforce analytics to increase stakeholder value.
- Apply analytical acumen encompassing data legitimacy, defined correlations, and forecasting of quantitative information.
- Develop optimal competitive advantage metrics for strategic HR alignment of policies, processes, performance management, and procedure alignments to operating strategies.
- Present complex data effectively in oral, written, graphical and other visual formats to key stakeholders.

Course Materials and Texts

Required Reading

- Caldwell, S. (2012). *Statistics Unplugged*. Cengage Learning. (about \$50.00 new, or you can find a used 3rd edition)
- [Student SHRM membershipLinks to an external site.](#) (\$49): SHRM is a National organization for HR professionals. It provides educational and networking resources for you as a student. It also offers HR Certifications for when you have the required work experience. Please register if you have not already done so. Registration is good for one year.

Optional Reading and Materials

- Schmuller, J. (2021). *Statistical Analysis with Excel*. (5th edition). (about \$25.00)

Required Technology

- **Analysis ToolPak Add-In for Excel**

You will need access to Excel to run analyses during the semester and especially for your individual project. This course will require the use of the Analysis ToolPak Excel add-in. Check your computer as soon as possible to make sure the add-in is installed. To check, select the “Data” tab on Excel and look at the “Analysis” group of commands.

Course Requirements

Course Assignments, Assessments, and Grading Policy

Grading and Late Work Statement

Grading Scale:

The following grading standards will be used in this class:

Grading Scale	
Grade	Percent
A	93-100
A-	90-92.99
B+	87-89.99
B	83-86.99
B-	80-82.99
C+	77-79.99

C	73-76.99
C-	70-72.99
D+	67-69.99
D	63-66.99
D-	60-62.99
E	Below 60

Assignment Categories

Assignment Categories

Activity	Percent
HW Assignments	15%
Quizzes	10%
Midterm Exam	25%
Final Exam	25%
Final Project	25%

Late Work Statement:

If you are late completing homework assignments, the grade **will be reduced by 5% each day** it is late. If you think that you will not be able to turn in the final project on time, please speak with me in advance (which means at least three days before the due date) to make other arrangements. Giving notice will minimize the penalty on the final project as opposed to providing no notice and incurring the full penalty. Late work will be handled according to individual circumstances and for that reason, the process may differ.

Assignment and Assessment Descriptions

The course requirements include one midterm and one final exam, multiple homework assignments, quizzes, and one individual project.

Homework Assignments:

With each module, there will be a related homework assignment. Some of these assignments will be a case analysis, some will be a response to questions, and others will include the calculation of various metrics. Homework assignments are open-book.

Assessments:

Each module has one associated quiz. Quizzes are open-book and timed (15 minutes).

The midterm and final exams will be made available online on the designated dates and consist of 50 multiple choice questions for each exam. **Makeup tests will be allowed only with pre-approval of the**

instructor and with an acceptable, documented reason. Acceptable reasons for makeup tests include severe illness, family emergencies or other unavoidable events. Test format for makeup tests may differ from the original test.

Final Project:

You are required to complete one final project at the end of the semester. For this project, you will be given a data set and will apply concepts you have learned in this class. See the [Final Project Overview](#) for details and the assignment prompt.

Required or Recommended Reading Assignments

Click here to enter text.

General Description of the Subject Matter of Each Lecture or Discussion

Week #	Module	Topic/Assignments
1	Course Orientation Module 1	<p>Course Orientation</p> <ul style="list-style-type: none"> • Read: Syllabus <p>Introduction to HR Analytics</p> <ul style="list-style-type: none"> • Read: <ul style="list-style-type: none"> ○ Chapter 1 ○ What is HR Analytics? ○ How 5 Successful Companies Are Using HR Analytics • Review: Lecture and PowerPoint • Discuss: Class Introductions • Watch: <ul style="list-style-type: none"> ○ What Is HR Analytics ○ How Does HR Analytics Help HRM? ○ What Is Statistics: Crash Course Statistics #1 • Quiz • HW
2	Module 2	<p>Data Management & Data Transformation</p> <ul style="list-style-type: none"> • Read: <ul style="list-style-type: none"> ○ 15 HR Analytics Case Studies with Business Impact ○ 10 Reasons to Shift to a Data-Driven High Business Impact HR Model ○ 4 Foundations of Data-Driven HR (optional) • Review: Lecture and PowerPoint (Part 1 and Part 2) • Quiz • HW
3	Module 3	<p>Central Tendency and Variability—Describing Data</p> <ul style="list-style-type: none"> • Read: Chapter 2 • Review: Lecture and PowerPoint • Watch: <ul style="list-style-type: none"> ○ Mean, Median, and Mode: Measures of Central Tendency: Crash Course Statistics #3 ○ Measures of Spread: Crash Course Statistics #4 • Quiz • HW

Week #	Module	Topic/Assignments
4	Module 4	<p>The Shape of Distributions and Fundamental Concepts</p> <ul style="list-style-type: none"> • Read: <ul style="list-style-type: none"> ◦ Chapters 3–5 • Review: Lecture and PowerPoint • Watch: <ul style="list-style-type: none"> ◦ The Shape of Data: Distributions: Crash Course Statistics #7 ◦ The Normal Distribution: Crash Course Statistics #19 • Quiz
5	Module 5	<p>Data-Driven Strategy and Data Visualization in Excel</p> <ul style="list-style-type: none"> • Read: <ul style="list-style-type: none"> ◦ Why Data Visualization is Now Essential for HR • Review: Lecture and PowerPoint • Watch: <ul style="list-style-type: none"> ◦ Data Interpretation & Storytelling HR Analytics Project Life Cycle ◦ Charts Are Like Pasta - Data Visualization Part 1: Crash Course Statistics #5 ◦ Plots, Outliers, and Justin Timberlake: Data Visualization Part 2: Crash Course Statistics #6 ◦ Telling Stories with Data in 3 Steps (Quick Study) (optional) ◦ Data Visualization Human Cognition & Decision Making (optional) • HW
6	Module 6	<p>Reliability and Validity and Data-Driven HR Tools</p> <ul style="list-style-type: none"> • Read: <ul style="list-style-type: none"> ◦ Employee Turnover Data Analysis: 8 Tips for Success ◦ Test-retest reliability and validity results of the Youth Physical Activity Supports Questionnaire (optional) • Review: Lecture and PowerPoint • Watch: <ul style="list-style-type: none"> ◦ Reliability and Validity ◦ How to avoid bias in scientific tests ◦ 2.3 Criteria: validity and reliability Quantitative methods The Scientific Method • Quiz • HW
7	Module 7	<p>Confidence Intervals</p> <ul style="list-style-type: none"> • Read: <ul style="list-style-type: none"> ◦ Chapter 6 • Review: Lecture and PowerPoint • Watch: <ul style="list-style-type: none"> ◦ Confidence Intervals: Crash Course Statistics #20 • Quiz • HW
8	Module 8	<p>Hypothesis Testing: Part 1</p> <ul style="list-style-type: none"> • Read: <ul style="list-style-type: none"> ◦ Chapters 7–8 • Review: Lecture and PowerPoint • Watch:

Week #	Module	Topic/Assignments
		<ul style="list-style-type: none"> ○ How P-Values Help Us Test Hypotheses: Crash Course Statistics #21 ○ P-Value Problems: Crash Course Statistics #22 • Quiz • HW • Midterm Exam (Modules 1-7)
9	Module 9	<p>Hypothesis Testing: Part 2 and Key Sources of HR Relevant Data</p> <ul style="list-style-type: none"> • Read: <ul style="list-style-type: none"> ○ Chapters 8–9 • Review: Lecture and PowerPoint • Watch: <ul style="list-style-type: none"> ○ T-Tests: A Matched Pair Made in Heaven: Crash Course Statistics #27 ○ Degrees of Freedom and Effect Sizes: Crash Course Statistics #28 ○ Playing with Power: P-Values Pt 3: Crash Course Statistics #23 • Quiz • HW
10	Spring Break	Relax
11	Module 10	<p>ANOVA and Data-Driven HR Tools</p> <ul style="list-style-type: none"> • Read: <ul style="list-style-type: none"> ○ Chapter 10 ○ Data-Driven Recruitment: The Benefits and 5 Best Practices ○ A Data-Driven Approach to Hiring More Diverse Talent • Review: Lecture and PowerPoint • Watch: <ul style="list-style-type: none"> ○ How to master recruiting Mads Faurholt-Jorgensen TEDxWarwick ○ ANOVA: Crash Course Statistics #33 ○ ANOVA Part 2: Dealing with Intersectional Groups: Crash Course Statistics #34 • Quiz • HW • Final Project: Acknowledgment
12	Module 11	<p>Correlation and Regression</p> <ul style="list-style-type: none"> • Read: <ul style="list-style-type: none"> ○ Chapter 12 • Review: Lecture and PowerPoint • Watch: <ul style="list-style-type: none"> ○ Regression: Crash Course Statistics #32 ○ Correlation Doesn't Equal Causation: Crash Course Statistics #8 • Quiz • HW • Final Project: Progress Report 1
13	Module 12	<p>Data Governance, Data-Driven Recruitment, and Data-Driven Engagement</p> <ul style="list-style-type: none"> • Read: <ul style="list-style-type: none"> ○ 5 Principles of Data Ethics for Business (Harvard Business School) ○ Employee Data Privacy Laws US: Are you up to speed? ○ What Is Data Privacy and What Does It Mean for HR?

Week #	Module	Topic/Assignments
		<ul style="list-style-type: none"> ○ Privacy Legislation Tracker <ul style="list-style-type: none"> ▪ Utah becomes fourth US state to enact comprehensive consumer privacy leg ○ 8 Aspects of GDPR Compliance: A Brief Guide for HR Functions • Review: Lecture and PowerPoint • Watch: <ul style="list-style-type: none"> ○ How to Measure Workplace Engagement? AIHR Learning Bite ○ HR Basics: Employee Safety and Health • Quiz • HW • Final Project: Progress Report 2
14	Module 13	<p>Data-Driven Employee Safety and Wellness & Learning and Development</p> <ul style="list-style-type: none"> • Read: <ul style="list-style-type: none"> ○ Learning & Development in People Analytics ○ How I Used Analytics to Create Better Employee Learning Courses • Review: Lecture and PowerPoint • Watch: <ul style="list-style-type: none"> ○ Learning and Development • Quiz • HW • Final Project: Progress Report 3
15	Module 14	<p>Data-Driven Performance Management & the Future of Data-Driven HR</p> <ul style="list-style-type: none"> • Read: <ul style="list-style-type: none"> ○ The Myth of the Bell Curve: Look for the Hyper-Performers ○ Managing Employee Performance ○ Future Of People Analytics: What Lies Ahead For Data-Driven HR? • Review: Lecture and PowerPoint • Watch: <ul style="list-style-type: none"> ○ How To Do Performance Management AIHR Learning Bite ○ The future of HR is digital. Are you ready? • Quiz • HW • Final Project: Submission
16	Module 15	<p>Final Review</p> <ul style="list-style-type: none"> • Review: Final Review & Study Guide • Final Exam (Modules 8–15)

Required Course Syllabus Statements

Generative AI

This course requires you to complete assignments that assess your understanding and application of the material. You are expected to do your own work, and the use of artificial intelligence (AI) tools, such as chatbots, text generators, paraphrasers, summarizers, or solvers, is strictly prohibited for any part of your assignments. Using these tools will be considered academic dishonesty and will be handled according to

the university's policy. If you have questions about the acceptable use of AI tools, please consult the instructor before submitting your work.

Using Remote Testing Software

This course does not use remote testing software.

This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers' immediate surroundings, may require use of a webcam while taking an exam, may require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

Required University Syllabus Statements

Accommodations/Students with Disabilities

Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancy-related conditions may contact UVU [Accessibility Services](#) at accessibilityservices@uvu.edu or 801-863-8747.

Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at DHHservices@uvu.edu

DHH is located on the Orem Campus in BA 112.

Academic Integrity

At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their [rights and responsibilities](#). In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in [UVU Policy 541: Student Code of Conduct](#).

Equity and Title IX

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – TitleIX@uvu.edu – 800 W University Pkwy, Orem, 84058, Suite BA 203.

Religious Accommodation

UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.

To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at accessibilityservices@uvu.edu. If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a [specially dedicated space](#) for meditation, prayer, reflection, or other forms of religious expression.