



FIN 6340.601 Syllabus

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

Semester: Spring

Course Prefix: FIN

Course Title: Analytics and Adv Statistics

Year: 2025

Course and Section #: 6340.601

Credits: 3

Course Description

Click here to enter text.

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: Craig Israelsen

Student Learning Outcomes

The main purpose of this course is to introduce you to quantitative methods for meaningful inquiry and research--using raw data. The goal is to deepen your understanding of how to manage and analyze information using appropriate statistical and analytical techniques.

The course will develop each student's quantitative abilities through the following:

- * Developing a research proposal that pertains to investment analysis and/or investment portfolio design (or to a topic of your choosing that employs the analysis of data).
- * Selecting a logical research methodology
- * Collecting and analyzing data that are appropriate to the proposal
- * Presenting your findings to the class
- * Preparing a professional-level summary report of your research project

This course assumes a reasonable level of proficiency in Excel and Powerpoint. As we work together you will...

- 1) learn more about a wide variety of investment asset classes,
- 2) learn how to measure the performance of investment products,
- 3) learn how to conduct intensive quantitative analysis of an investment portfolio (such as calculation of a correlation matrix, calculation of beta and r-squared, calculation of annualized returns and rolling returns, etc.),
- 4) learn how to communicate complex research methods in simple terms.

Course Materials and Texts

Spreadsheet databases are provided.

Course Requirements

Course Assignments, Assessments, and Grading Policy

Presentation & Research Paper: (100 points total)

You will have the opportunity to present your research project to the class. The presentation should be at least 20 minutes long and is worth 50 points. An 8-minute question-and-answer session will follow each presentation. The presentation is worth 50 points. Don't get stressed out about this. The point of presenting your research is to share what you have learned and receive helpful feedback—not to win the Nobel prize. 20 minutes may seem long—it's not. You'll wish you had more time.

In addition, you will prepare a research paper in the format of a journal article that summarizes your research project. The research paper is worth 50 points. The hope is that you will actually submit the article to a journal for publication.

Grading criteria I use for your presentation and research paper:

Overall quality of presentation (clarity of slides, graphics, data tables, examples)	10 points
Quantitative analysis (logic, accuracy of calculations, use of relevant statistical techniques)	25 points
Originality of research and application to realistic issues	15 points

Required or Recommended Reading Assignments

Click here to enter text.

General Description of the Subject Matter of Each Lecture or Discussion

January 7	Research methods: Quantitative and Qualitative, Population vs Sample
January 14	Raw data sources and raw data preparation Examples of data analysis and presenting research findings
January 21	Investment portfolio design and performance analysis
January 38	Statistical calculations using Excel:

	correlation, alpha, beta, R2, mean, median, mode, geometric mean, standard deviation, rolling returns
February 4	Statistical calculations using Excel: Sharpe ratio, information ratio, quartile and decile analysis
February 11	Data analysis using index data (S&P 500, Russell 2000, etc.)
February 18	Introduction to the Retirement Portfolio Analyzer (RPA)
February 25	Deeper analysis using RPA
	Discussion with each student about your research ideas/project
March 4	Progress report from each student on your research project idea and resources you need
March 11	UVU Spring Break
March 18	Open lab class to discuss specific questions about your research
March 25	Open lab class to discuss specific questions about your research
April 1	Open lab class to discuss specific questions about your research
April 8	Research presentations by students
April 15	Research presentations by students
April 22	Research presentations by students

Required Course Syllabus Statements

Generative AI

Don't use AI to write your research report. That's a bad idea.

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.