

 Edit

POL5520

## Quantitative Analysis


 Course Description

Thanks to new information and communication technologies, collecting quantitative data has become more convenient than ever. Meanwhile, public policymakers have been held more accountable for their evidence-based programs. This course will provide an introduction to the research process that includes measurement, sampling, data management, analysis, and interpretation. We will learn about quantitative analysis elements through the use of SPSS (Statistical Package for Social Sciences).

**Do you want a PDF version of your Syllabus? Follow the [Student User Guide](#)**

[\(https://vermontlaw.instructure.com/courses/2179/files/276888?wrap=1\)](https://vermontlaw.instructure.com/courses/2179/files/276888?wrap=1) ↓



[\(https://vermontlaw.instructure.com/courses/2179/files/276888/download?download\\_frd=1\)](https://vermontlaw.instructure.com/courses/2179/files/276888/download?download_frd=1) to obtain a copy for your records.


**Teaching Professor:** Tao Sun ([tsun@vermontlaw.edu](mailto:tsun@vermontlaw.edu) (<mailto:tsun@vermontlaw.edu>))

**Lecture Time & Place:** T 3:35 PM-5:10 PM, Oakes Hall 210

**Course Credits:** 2

**Required Textbook and Material:**

- Each student is required to purchase IBM SPSS Statistics Grad Pack 29.0 STANDARD. Hearne Software is one of the vendors; [SPSS Grad Pack for Students v29 Selection \(hearne.software\)](#)  [\\_url=https%3A%2F%2Fwww.hearne.software%2FSPSS-Grad-Pack-Selection-v29&data=05%7C02%7CAMCDOWELL%40vermontlaw.edu%7C47a735b0bc1a4dffa3fa08dcbdf7498%7C8](https://nam12.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.hearne.software%2FSPSS-Grad-Pack-Selection-v29&data=05%7C02%7CAMCDOWELL%40vermontlaw.edu%7C47a735b0bc1a4dffa3fa08dcbdf7498%7C8); they will give a 15% discount on all purchases students make with their school emails. You can also purchase (rent) it for 6 months for \$49 from the following site: <https://studentdiscounts.com/>  [\(https://studentdiscounts.com/\)](https://studentdiscounts.com/), or the other IBM vendors from

<https://www.ibm.com/products/spss-statistics/gradpack>  [\\_ \(https://www.ibm.com/products/spss-statistics/gradpack\)](https://www.ibm.com/products/spss-statistics/gradpack). Please make sure you purchase the STANDARD version, not the BASE or PREMIUM versions.

- There is no required textbook. You will find access to the course material in each module of the course.

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## Course Objectives

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

1. Understand the fundamentals of the research process;
2. Conduct basic statistical analyses to answer relevant research questions;
3. Critique empirical research findings;
4. Develop a quantitative research proposal in your field of study.

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## Instruction and Evaluation Activities

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A variety of learning activities are designed to support the course objectives, facilitate different learning styles, and build a community of learners. Learning activities for each module include the following:

### **Methods of Instruction | Data and Multimedia**

This course will use a variety of instructional materials, including lectures, videos, discussions, data analyses, and hands-on demonstrations.

### **Methods of Instruction | Interaction and Discussions**

In this residential course, you will interact with other students and me in the classroom, via regular discussion boards, and over MS Teams. You will also meet with me during online office hours to help you solve issues you may have in class exercises and homework assignments.

You are expected to stay engaged in the discussion board activities.


A good discussion post is:

- Substantial (relates to the course material)
- Concise (one screen may be the ideal message length)
- Provocative (encourages others to respond)
- Hermeneutical (expands concepts or connects ideas in new ways)
- Timely (occurs in a reasonable time frame - when the topic is under discussion)
- Logical (supports point of view with reasons and evidence)
- Grammatical (is well written)

Only those comments that meet these criteria receive full credit.

## Methods of Evaluation | Assignments, Projects, and Assessments

This course will require six homework assignments, seven class exercises, twelve discussion posts, and a final group project. You will be given an opportunity to revise your exercises and assignments. Revisions are optional but not required. All written work should be excellent, high-quality academic work. Poorly written, unedited assignments will not be awarded a good grade. It is vital at this stage in your career that you set high standards for your written work product. All word counts include footnotes. Rubrics are provided for your exercise, assignment, discussion post, and final project.

APA citation style is preferred for the final project. Please check out the following link for guidance on in-text citations and references in APA style: <https://guides.libraries.psu.edu/apaquickguide>  (<https://guides.libraries.psu.edu/apaquickguide>)

## Due Dates

Whenever applied, class exercises are due at the end of each lecture, while homework assignments are due at the end of the week (Sunday).

## Course Schedule

- **Module 1 (AUG. 26-SEPT. 1): Research Process, Literature Review and Hypothesis Development**
  - Module 1 Homework Assignment
  - Module 1 Discussion
- **Module 2 (SEPT. 2-8): Variables, Definitions and Levels of Measurement**
  - Module 2 Homework Assignment
  - Module 2 Discussion
- **Module 3 (SEPT. 9-15): Introduction to SPSS and Data Entry (SPSS)**
  - Module 3 Class Exercise
  - Module 3 Discussion
- **Module 4 (SEPT. 16-22): Reliability and Validity**
  - Module 4 Homework Assignment
  - Module 4 Discussion
- **Module 5 (SEPT. 23-29): Factor Analysis and Reliability Test (SPSS)**
  - Module 5 Class Exercise
  - Module 5 Discussion
- **Module 6 (SEPT. 30-OCT. 6): Correlation and Association (SPSS)**
  - Module 6 Class Exercise
  - Module 6 Discussion
- **Module 7 (OCT. 7-13): Probability and Non-Probability Sampling**
  - Module 7 Homework Assignment
  - Module 7 Discussion
- **Module 8 (OCT. 14-20): Fall Break (No Class on Oct. 14-15)**

- **Module 9 (OCT. 21-27): Descriptive Analysis and Normal Distribution (SPSS)**
  - Module 9 Class Exercise
  - Module 9 Discussion
- **Module 10 (OCT. 28-NOV. 3): Experimental Design**
  - Module 10 Homework Assignment
  - Module 10 Discussion
- **Module 11 (NOV. 4-10): Comparison of Means (T-Tests) (SPSS)**
  - Module 11 Class Exercise
  - Module 11 Discussion
- **Module 12 (NOV. 11-17): Analysis of Variance (ANOVA) (SPSS)**
  - Module 12 Class Exercise
  - Module 12 Discussion
- **Module 13 (NOV. 18-24): Survey Design I**
  - Module 13 Homework Assignment
  - Module 13 Discussion
- **Module 14 (NOV. 25-DEC. 1): Regression Analysis (SPSS) (Thanksgiving Holiday: Nov. 28-29)**
  - Module 14 Class Exercise
- **Module 15 (DEC. 2-8): Survey Design II**
  - Module 15 Final Project (Research Proposal)



## Grading Policy and Scale

Final Grades in this course are determined by the following criteria:

### Grading Policy

Assignment Category	Weight of Category
Discussions	20%
Class Exercises	30%
Homework Assignments	30%
Final Group Project	20%
<b>Total</b>	<b>100%</b>

I will assign grades for this course per the following grading system and in accordance with the Academic Standards in the [Student Handbook](https://www.vermontlaw.edu/student-handbook): (<https://www.vermontlaw.edu/student-handbook>)

### Grading Scale

Letter Grade	Grade Point Average (GPA)	Percentage
A	4.00	94-100%

Letter Grade	Grade Point Average (GPA)	Percentage
A-	3.66	90-93%
B+	3.33	87-89%
B	3.00	84-86%
B-	2.66	80-83%
C+	2.33	77-79%
C	2.00	74-76%
C-	1.66	70-73%
D+	1.33	67-69%
D	1.00	64-66%
F	0.00	<64%

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## Course Expectations

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### Student Expectations

You are expected to log on to the course regularly each week and spend approximately 20 hours each week reviewing assigned material, studying and considering that material on your own, and participating in activities and assignments presented in each module. You are expected to post all assignments by the stated deadlines and exhibit significant effort and professionalism in all work. You are expected to participate in a timely and responsive manner in group projects, which may include multiple posts and exchanges prior to an assignment deadline.

### Faculty Expectations

I will be online and offline to answer e-mails, posts to the **Ask Your Professor** page, and other inquiries and will endeavor to answer questions within **24 hours**. My cell number is [603-667-5140](tel:603-667-5140). Please text me with your questions if you prefer to contact me this way.

**Virtual Office Hours:** Please feel free to schedule office hours with me by appointment. I will be happy to speak with you over the phone or in a Microsoft Teams meeting. I will be available to answer questions about feedback on exercises and assignments during Office Hours and by appointment. I will post timely announcements as appropriate to this course, including any changes to the schedule or assignments. **I will not actively monitor the Hallway Discussion forum**, but I will post messages there when needed.

## Academic Support

The Academic Success Program (ASP) is empowering, individualized, and available to every Vermont Law student. ASP offers skill-building through workshops, one-on-one consultation, and mentoring by upper-level students. If you are looking for ways to shrink the learning curve, ASP can connect you with study aids and supplemental materials (i.e., CALI, TWEN, and Kaplan Kick Start) that fit your specific needs. Whether you are preparing for the Bar Examination or your first 1L exam, ASP exists to help you.

**You can visit ASP virtually through the ASP Portal** 

<https://www.vermontlaw.edu/community/students/academic-success> (VLGS Login Required), and clicking the link to the right of the **ASP Student Portal** heading.

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## Academic Policies

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### Participation

Each module/week, you will engage in offline and online discussions. Your participation and engagement in these discussions will be assessed each week based on the quality and accuracy of your answers to the assigned questions and tasks as well as your interaction and engagement with your peers (this includes responding to the initial question/task **and** replying to your classmates). Failure to participate in the assigned discussions will significantly affect your grade as it reflects your level of effort in the course's learning community. Your posts, including the accuracy, as well as your replies and comments to your peers should contribute to the overall learning community. Your online participation will be assessed using the **Discussion Rubric**.

Of note, the readings and other materials presented in this course build upon each other so it is critical that you complete the initial assignments early in the module/week so that you may proceed to the next set of materials and assignments. Additionally, it is imperative that you post early so that the class may benefit from your discussion and that you have opportunities to reply to and engage in meaningful dialogue with your peers in the discussion forums as well.

Please keep all modules' topical, subject-related discussions in the assigned module discussion forums. Discussions posted in the **Hallway Discussions** and **Ask Your Professor** discussion forums will not count toward weekly participation.

### Attendance

You are expected to participate in all course activities except where religious observance, serious illness, personal emergency, or a reason that is adequate in my judgment that prevents such participation.

**Attendance** means posting answers to discussion questions, participating in the online and classroom community, and submitting all assignments in a timely fashion.

## Late Work

You must complete all activities in this course by the identified deadlines in the **Course Schedule**. Failure to submit an assignment, complete a discussion, or participate as outlined in the **Learning Modules** and **Course Schedule**, will lead to a grade reduction. I recognize that you all have busy personal and professional lives that sometimes make meeting deadlines impossible. Early communication with me is vital if you foresee that. I want to clarify that I expect you to turn in assignments on time. You will lose 10% of the total potential points for each day that an assignment is late, down to 50% off. I will not accept an assignment more than **three** days after its due date.

This late policy does not apply if I have approved an extension for the requested activities because of an emergency or other extenuating circumstances. You must promptly request the extension and inform me of any extenuating personal circumstances that warrant an extension.

If you have an emergency or some other extenuating personal circumstance, you must inform me and the administration as soon as possible. Only upon this notification will I be able to discuss a possible accommodation.

**If there is a medical or family emergency or other extraordinary or extenuating circumstance, you should contact me and the Vice Dean for Students to make alternative arrangements. Again, prompt communication is key for you to get an extension, and that is your responsibility to do so.**

## Professor Comments

I will provide substantive comments on each of your deliverables. I may provide additional comments during general discussions. If you have questions or doubts about the course or assignment instructions, please let me know so that we can discuss them over email or Teams.


## Add/Drop and Incomplete Policy

Please refer to the **Student Handbook** [↗ \(https://www.vermontlaw.edu/student-handbook\)](https://www.vermontlaw.edu/student-handbook) to review these policies. You can find the **Student Handbook** on the **Online Resources page**. [↗ \(https://vermontlaw.sharepoint.com/sites/OnlineLearning/SitePages/OLP-Resources.aspx\)](https://vermontlaw.sharepoint.com/sites/OnlineLearning/SitePages/OLP-Resources.aspx)


## Academic Honesty

The Vermont Law and Graduate School Honor Code and the Code of Ethics apply to all activities, assignment submissions, and conduct in this course. You are required to be familiar with the Honor Code. Student conduct in this course may not violate the Prohibited Conduct classes of violations





recognized in the Honor Code (located in the [Student Handbook](#)   [\(https://www.vermontlaw.edu/student-handbook\)](https://www.vermontlaw.edu/student-handbook) ).



Plagiarism is a class one violation of Vermont Law and Graduate School's Honor Code. The school uses various software programs to detect plagiarism in all forms. Any suspected cases of plagiarism will be reported to the Vice Dean for Students.

Read the Vermont Law and Graduate School Student Handbook section on plagiarism and the article, [What You Don't Know Can Hurt You: How To Recognize Plagiarism and Avoid Committing It](#),   [\(https://www.vermontlaw.edu/sites/default/files/2022-07/Plagiarism%20Presentation%20AFC%202022.pdf\)](https://www.vermontlaw.edu/sites/default/files/2022-07/Plagiarism%20Presentation%20AFC%202022.pdf) prior to submitting your first assignment.

## Netiquette

All communications in this course (email, discussion boards, and assignments) should use good netiquette. For an overview and explanation of this, visit the [Netiquette Home Page](#)   [\(http://www.albion.com/netiquette/\)](http://www.albion.com/netiquette/) and follow the [Core Rules of Netiquette](#)   [\(http://www.albion.com/netiquette/corerules.html\)](http://www.albion.com/netiquette/corerules.html) .


## Accessibility

We encourage students with disabilities, visible or hidden, to seek appropriate accommodations. Discussions regarding accommodations are confidential. The VLGS student handbook authorizes me to make some accommodations, but others may require an additional request. Please visit the accommodations page within the [Academic Success Program](#)   [\(https://www.vermontlaw.edu/community/students/academic-success/accommodations\)](https://www.vermontlaw.edu/community/students/academic-success/accommodations) to seek more information and contact the Vice Dean for Students. Accommodation resources are not retroactive, so please inform us as early as possible if you need accommodations. We will provide reasonable access in line with the [Disability Policy](#).   [\(https://www.vermontlaw.edu/sites/default/files/2018-10/2018-2019DISABILITYPOLICYANDPROCEDURES.pdf\)](https://www.vermontlaw.edu/sites/default/files/2018-10/2018-2019DISABILITYPOLICYANDPROCEDURES.pdf) .

## Title IX

Vermont Law and Graduate School (VLGS) is committed to fostering a safe, productive learning environment. Title IX and VLGS policy prohibit discrimination based on sex. Sexual misconduct – including harassment, domestic and dating violence, sexual assault, and stalking – is also prohibited at VLGS.

VLGS encourages anyone experiencing sexual misconduct to talk to someone about what happened, so they can get the support they need, and VLGS can respond appropriately.

If a student wishes to speak confidentially about an incident of sexual misconduct, wants more information about filing a report, or has questions about school policies and procedures, please contact VLGS's [Title IX Coordinator](#)   [\(https://www.vermontlaw.edu/title-ix\)](https://www.vermontlaw.edu/title-ix) .



VLGS is legally obligated to investigate reports of sexual misconduct. Therefore, VLGS cannot guarantee the confidentiality of a report, but VLGS will consider a request for confidentiality and respect it to the extent possible.


Professors are also required to report incidents of sexual misconduct and thus cannot guarantee confidentiality. This policy includes any mention of sexual misconduct that a student might make in their written work. A professor must provide VLGS's Title IX coordinator with relevant details, such as the names of those involved in the incident.

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## Other Policies

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All student handbook policies and procedures apply to this course. For more information about student academic and institutional policies, read the [Student Handbook](https://www.vermontlaw.edu/student-handbook)  (<https://www.vermontlaw.edu/student-handbook>).

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