Program in Mathematical Methods in the Social Sciences

2021–22 Year in Review

Northwestern

WEINBERG COLLEGE OF ARTS & SCIENCES

Program in Mathematical Methods in the Social Sciences

mmss.northwestern.edu

Welcome Letter from Director



Jeff Ely

Hello again. When I wrote last year we were looking forward to a return to normalcy and stability in 2021-22. I am happy to tell you that these expectations were mostly met. It was so refreshing to be back teaching in the classroom, engaging with students, and resuming our usual social events.

Still, the year ended on a bittersweet note as we said goodbye to Professor Mark Iris who retired with Emeritus status. Professor Iris has been an MMSS fixture for more years than most of us could count. Many of you will remember Professor Iris' role as supervisor and mentor to generations of students doing Police Projects. These are unique Senior Thesis projects in which Professor Iris, acting as liaison with Police Departments in major US cities, oversaw teams of MMSS students carrying out original and impactful research.

We also said goodbye to Professor Jean Clipperton who has been teaching one of our Political Science courses for the past several years. Professor Clipperton's course has had a unique impact on our curriculum, combining writing and

empirical modeling in a way that many students found distinctive and inspiring.

Looking ahead to 2022-2023 I am excited to welcome Professor Ben Golub, a world expert on the science of social networks, to the MMSS community. Professor Golub's new course on social networks brings an exciting and rapidly developing area of social science research to our MMSS offerings.

2/12665

Jeff Ely is the Charles E. and Emma H. Morrison Professor of Economics at Northwestern University

Year in Review Fall 2021

Northwestern Program in Mathematical Methods in the Social Sciences

October—Fall Welcome Party

After a virtual kick off to the year with our Zoom First Year Orientation sessions, our fall welcome event was able to be held in person and it is safe to say that everyone really enjoyed getting together. We were on the terrace at Harris Hall and the weather could not have been more beautiful—the day before and after had heavy rain showers so it was a lucky day for the MMSS community. Professor Ely underscored how happy everyone was to see the MMSS computer lab open again and that classes were back to being in-person! He highlighted how powerful the interdisciplinary curriculum of studying social science along with math methods is for students and the resulting learning opportunities it creates both in and outside the classroom.











Students and faculty enjoyed a fun event on a gorgeous fall afternoon in Evanston.



Olivia Lee and Professor Jean Clipperton.



Year in Review Fall 2021

November—First Year Advising

Thanks to our awesome Peer Advisors—
Imai Anabayan, Olga Lew-Kiedrowska and
Savir Maskara for creating a positive and familiar
environment for the incoming Class of 2025.
Similar to the previous year, our MMSS Peer
Advisors had to shoulder a good share of helping
the first years acclimate and feel connected
amongst the many COVID safety restrictions.



Olga outlines some of the more popular elective and distribution courses offered in the winter quarter that she and her MMSS peers have taken.

Year in Review **Winter 2022**

February—Alumni Spotlight: **Andrea Marcos Waldron Connections Event**

Senior MMSS student Charis Lee along with Waldron coordinator Cassie Petoskey helped to introduce and moderate a Q&A session with 2012 graduate Andrea Marcos who spoke about her career path to Tala, a financial technology company on a mission to build a financial system that works for everyone. Andrea discussed her time on campus as a Sociology and MMSS student as each major played into her career success and has helped her navigate to a role she loves. She is passionate about education reform and still credits her MMSS thesis as a powerful opportunity to combine her coursework in sociology with the practical tools in MMSS into a cohesive research project. The paper, entitled "Higher Education Alternatives for Disadvantaged Students" helped crystalize a theory Andrea held about economic returns for disadvantaged students attending vocational schools versus four-year, liberal arts colleges. The paper was published in the Northwestern University Research Journal (NURJ) and can be accessed in the on-line MMSS Thesis Library.

Andrea is currently the Director of Credit Strategy Analytics at Tala, a data science and alternative credit scoring company, where she oversees the Mexico, Philippines and Kenya portfolios of existing clients.

Waldron Student Alumni Connections Program

Within Weinberg College, this program connects arts & sciences alumni to current students to share career advice and expertise (more info here). Programs include industry panels, career treks, and an annual Career Summit in September. These events used to be in solely in person, but because of the pandemic they have also incorporated virtual programs via Zoom which has allowed alumni from all over to participate. Some alumni participate in a one-time capacity, while others participate in multiple programs. We can pass along your contact information to our Waldron colleague, Cassie Petoskey, to see how we might get you plugged in on a future panel. Please email mmss@northwestern.edu if you would like to learn more.



Andrea Marcos '12 and MMSS Senior Charis Lee participate in a Waldron **Connections Event** via Zoom.

Year in Review Spring 2022

April—Young Alumni Career Panel

Young alumni Ben Hool '19, Lexi Lu '19, and James Zhou '21 plus Professor Aaron Yoon as the moderator helped highlight some of the important considerations students need to make in the recruiting and hiring process. Thanks again to Professor Yoon and our young alumni for the valuable insights and candid comments shared amongst the students. Great perspective on how to think through and manage the many opportunities being an MMSS student provides.

"The young alumni career panel was a refreshing experience seeing current MMSS students exploring so many different avenues for their post-graduation plans. Rather than focusing on any specific career path, the students were keen to listen to our lessons and advice they could apply to any field they choose. MMSS taught all of us alumni how to dissect, analyze, and solve problems that perhaps no one has the 'right' answer to; this event demonstrated to the students how we applied what we learned in MMSS to our successes after graduation."

Ben Hool, Class of 2019



Moderator: Aaron Yoon

Aaron Yoon is an assistant professor at Kellogg School of Management. He is interested in how to account for and quantify a firm's Environment Social Governance (ESG) efforts and integrate the information into portfolio decision making process. The methodologies suggested in his research have been widely implemented by asset owners and investment managers. At Northwestern, he went through the 4 Year BA/MA in economics and the MMSS program. Prior to pursuing graduate work at Harvard University, he worked as an equities salestrader and research analyst at Credit Suisse.



Ben Hool

Industry: Finance
Company: PEAK6 Investments
Title: Equity Derivatives Trader
Graduation Year: 2019
Majors: MMSS, Statistics,
and Economics
LinkedIn Profile



Lexi Lu

Industry: Tech (Previously

Consulting)

Company: TikTok (Previously Applied Predictive Technologies)

Title: Strategy Analytics **Graduation Year:** 2019 **Majors:** Economics, MMSS

LinkedIn Profile



James Zhao

Industry: Consulting

Company: McKinsey and Company

Title: Business Analyst **Graduation Year:** 2021 **Majors:** MMSS, Kellogg MA

certificate
LinkedIn Profile

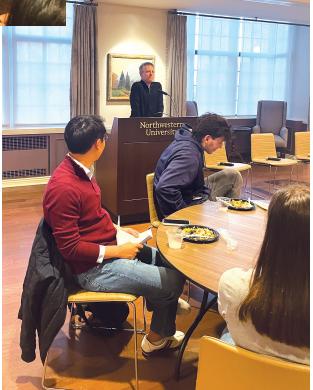


April— Young Alumni Career **Panel**





Professor Aaron Yoon, Lexi Lu '19, Professor Jeff Ely, Ben Hool '19, and James Zhou '21.



Classroom Spotlight

MMSS 311-2 Topics in Formal Models in Social Science



Sirus Bouchat, Assistant Professor of political methodology started teaching the MMSS 311-2 course in 2018. She shared some thoughts on the course and its evolution over the last five years.

What is the most important topic you teach in your course?

I think of this class less as a series of topics students should engage with, and more as a set of opportunities for students to be exposed to a novel approach or type of model, contend with how it's structured, and

determine how, when, and whether it makes sense to apply it. Students will (hopefully) be able to walk away with some practical skills and understanding, but my bigger aim is to give students several different chances to learn how to *learn* about something they may never have encountered before, and to see how it connects to their own personal interests as well as tools they've built in other classes.

Why do you think it is important for students of social science to learn this material?

One of my goals in the course is empowering students who will, in the future, work on cross-functional teams or on projects that leverage expertise from multiple disciplines and paradigms. "Machine learning" and "Al" have enormous social and economic cache currently, but to people from backgrounds outside of engineering can seem intimidating. My hope for students in my class is that they can not just understand and engage with the types of machine learning methods and models being used by researchers and industry, but also that they are able to critique applications of these methods and bring fundamental social science expertise and refinement to where and how these methods are applied.

What was your first impression of MMSS students?

I have consistently found MMSS students to be driven and inquisitive people who take their work very seriously. Outside of MMSS, I mainly teach graduate students, and my MMSS students engage with course material at the same level (or more) every single time.

Is there anything you plan to do differently next time—or—maybe a better one would be "how has the course changed over the years?"

I've adapted this course in both content and style several times in the last few years and am always open to student feedback on how to make their experience worthwhile. As the course has evolved, I've endeavored to give students even more ownership of their learning--to choose how and on what types of projects they would like to be evaluated--and my aim for future iterations is to create clearer opportunities for students to challenge themselves if they want, or to experiment with something totally new in a lowrisk way if that feels exciting. Since the first time I ran this course, I've tried to provide more scaffolding for students who are just getting their feet wet with coding in R; in the past year or so, some students have come in with a huge amount of preexisting knowledge, and a desire to move beyond what the class has typically offered. I plan to still give opportunities for students arriving at this material for the first time to try it out in a lower-stress way, but am also looking for new and different ways to let students choose their own adventure with the methods and tools they want to work with.

"MMSS 311-2 explores various machine learning models in R. The course seeks to give students a grasp on various useful topics such as web scraping, text analysis, and machine learning regressions, things which I have found myself going back to after the class. The class inspired me to pursue my own machine learning project over the summer where I used various elements of the class to help make a prediction algorithm, and I know other students who have found things like web scraping helpful in their own research or other classes."

MMSS student Will Pattie, Class of 2024

MMSS 2022

Program in Mathematical Methods in the Social Sciences

Northwestern

Senior Thesis Projects

The senior thesis is the capstone to the MMSS curriculum. It provides students the opportunity to draw upon the skills they have gained in class and apply then to a substantial piece of original research. During their junior year, MMSS students already begin to select a topic and advisor. As seniors, they work to refine their research question, complete any further data collection, and compile their analysis into a cohesive paper. Here are summaries of three research projects from the class of 2022:

"The Effects of Price Transparency Legislation on Hospital Profitability"

by Kevin Bai

Kevin's thesis was on The Effects of Price Transparency Legislation on Hospital Profitability. It was done under the supervision of Molly Schnell in the Department of Economics. Much has been made in the popular press about the obscurity and variability of hospital pricing. The policy debate centers around potential legal requirements for price transparency, mainly focusing on consumer protection. Kevin looked at the effects of a Massachusetts law that was the first to require that insurers provide co-pay prices. His intriguing discovery is that price transparency indeed lowered hospital margins but it has a potential anti-consumer unintended consequence. The lower margins has the potential to make some hospitals unprofitable and force them to exit.

"You Lie, I Leave: Believing Dynamic Cheap Talk under Receiver Commitment"

by Daniel Luo

Daniel's thesis, supervised by Professor Yingni Guo in the Department of Economics, is a theoretical analysis of credible communication with an application to the design of perjury laws. Daniel uses game theory to model the testimony of a witness in a criminal trial. The testimony is valuable only if the witness can be trusted to be truthful. In Daniel's model there is a small probability that the witness is biased and the optimal perjury law is constructed to incentivize even a biased witness to tell the truth.



"Statelessness in Estonia and Latvia"

By Jacqueline Jeromin

Jacqueline wrote her thesis on the topic of Statelessness in Estonia and Latvia under the supervision of Professor Lauren Stokes in the Department of History. The Baltic countries have a significant minority population of "stateless" individuals, lacking citizenship in any country. Many of these are Russian-speaking families who migrated during Soviet rule. Over time through formal and informal processes of assimilation the stateless populations are declining. Jacqueline reviews the historical literature on these trends and uses statistical modeling to summarize the current demographics and forecast future trends.

Classroom Spotlight

MMSS Team Devises a Staffing Model for the Houston Police Department Project

Amanda Sugiharto, Samuel Junker, and CJ Miller worked with the Houston Police Department—their paper was titled Allocating Patrol Officer Using Houston Police Department Calls For Service Data and was the 13th MMSS thesis with the Houston agency.

The students were tasked with devising a staffing model: how many officers should be assigned to each shift for each of Houston's 25 patrol districts. Policing is very labor-intensive, and strained municipal budgets dictate that officers be used as effectively as possible. Working with a data base of hundreds of thousands of Calls for Service, these students devised a staffing model that looked at the number of calls in each district by shift, but also took into account the times responses to calls were delayed due to backlogs.

Their model also allowed swift response to the highest priority calls in which an officer or a citizen faced extreme danger. All these were calculated to cover worst case scenarios—those hours when the Houston police receive the greatest numbers of 911 calls. And the model was resource neutral—no increase in the number of patrol officers, only new recruits added as serving officers retired or resigned.

In short, there were lots of moving parts, all of which were successfully addressed. The end product had two key features. First, it gave Houston a precise staffing model—allocating each graduating class from the Police Academy across the various districts and shifts so as attain, as much as possible, a uniform workload across the agency.

Second, the students gave Houston the basic formula, so Houston can apply it on its own in the future, and with great flexibility. For example, if Houston wishes to recalculate staffing after revising the weighting given to the highest priority calls, it can easily do so.

These students not only did excellent academic work, they also provided a public service. Their work will help to enhance the basic safety of the people of Houston. The students gave their presentation to the Chief and full command staff of the Houston Police Department. Dr. Iris reported that at the conclusion, their response was the most enthusiastic he ever witnessed among the dozens of presentations he has observed in his years with MMSS.

Mark Iris, Amanda Sugiharto, CJ Miller, Chief of Police Troy Finner, Sam Junker and Professor Joe Ferrie.



Northwestern

Program in Mathematical Methods in the Social Sciences

Retirement Dinner for Lecturer Emeritus Mark Iris

We hosted a retirement dinner for Professor Mark Iris to celebrate his many contributions and years of service to the MMSS Program. Mark Iris has been advising MMSS students on their senior thesis project since 1997. Producing 25 years worth of outstanding thesis projects that earn high praise from the many police departments around the country. His students often remark their time spent working on a police project was one of the most impactful experiences during their time at Northwestern.

Mark was also honored with emeritus status at this year's commencement ceremony for for his 37 years of total service in Weinberg both as a political science professor and his work with the MMSS Program.



Top left: Mark Iris Top right: Mark's son Ari Iris, MMSS Program Coordinator Nicole Schneider, MMSS **Program Director**

Jeff Ely

Above left: Alum David Kim and Mark's long-time friend and collaborator Sandy Jo Macarthur

Above right: Several current and past students were able to join for the celebration

We used an online platform to invite many students who could not be in attendance to submit a note of appreciation—here are some of the enthusiastic remarks from his mentees.

Professor Iris — Congratulations on your retirement from MMSS! Thank you for your lasting contributions to the program. It's hard to believe it's been 20+ years since you advised me on my CPD thesis, but it's still even more unbelievable that someone broke into my car and stole my data the day I got it from CPD! Good thing they tossed my bag into the street and we got it back. Never a dull moment for you during your MMSS work, I'm sure. Best wishes in all your future pursuits.

Adam Ginsburgh, MMSS 2001

Dr. Iris — Congratulations and best wishes in retirement! Looking back, I was so lucky to have you as my mentor. I learned a lot and enjoyed working together with you to identify the crime hot spots in the Houston area. In fact, I use some of what I learned 10 years ago for my job now! I remember one time we went to Houston together and you jogged miles before our schedules in a morning. I hope your retirement will involve travels and jogging in all the beautiful places around the world. Ken Park, MMSS 2012

Dr. Iris — Having you as a mentor throughout senior year was a career changing experience for me. Thank you for providing encouragement to countless students, your dedication to policing research, and setting such a high yet achievable bar for good work under your supervision. While I regret not being present for your retirement party, I am forever proud and grateful to have been under your tutelage. Congratulations and yasher koach on an outstanding career

Andrew Zessar, MMSS 2016

Mark — My LAPD MMSS thesis was a highlight of my entire undergraduate experience. I'm very grateful that your hard work and dedication brought these kinds of opportunities into being and supported so many students for so many years. Thank you!

All the best in your next step -Zach Freeman, MMSS 2008

MMSS Senior Graduation Class of 2022 at the Allen Center

This year's celebration was the first post-Covid that felt pre-Covid. Professor Ely addressed the students and their friends and family, reminding everyone that this elite program of hand-picked students offers a unique and prestigious experience we are all so grateful to be a part of at Northwestern.

MMSS is a program and not a department so faculty are pulled from across the Weinberg College. But it is easy to source faculty to teach in MMSS as they know the students are some of the most talented and engaged on campus. Through courses in econometrics and game theory, and Eddie Dekel's Foundations of Math Social Science, they are trained with an eye toward skepticism when faced with immense amounts of data. This helps them to craft it into useful information. MMSS students also learn how to make the most out of very limited and random data.

And the senior thesis offers students a rigorous and dedicated approach to a social science question where they can showcase their critical thinking and advanced treatment of data. This outstanding academic experience helps our grads translate complete math into clear ideas and solutions, and from all of these points of distinction, the world has come to know that MMSS students are highly sought after and pursue professional goals in academics and a range of professional fields.

Jeanette M. Dacey and Michael F. Dacey Awards

Former MMSS Professor Michael Dacey and his wife Jeanette provided a monetary gift to both build a research fund in support of MMSS students as they completed their thesis and coursework, and award prizes for outstanding student accomplishments.



The Michael F. Dacey **Prize for the Most Outstanding MMSS** Senior Thesis: Houston Police Department Project with the student team of CJ Miller, Samuel Junker and Amanda Sugiharto; Advised by Professor Mark Iris.

The Jeanette M. Dacey **Prize for the Best** Performance in MMSS **Required Coursework: Anthony Kim**

Northwestern

WEINBERG COLLEGE OF ARTS & SCIENCES

Program in Mathematical Methods in the Social Sciences



Senior Graduation Class of 2022 at the Allen Center



















Senior Profiles

Mari Annest '22

University of Alabama Culverhouse College of **Business, Master of Business Administration**



Why did you apply to MMSS?

Upon applying to Northwestern, I didn't know exactly what I wanted to study. I'd always enjoyed math throughout high school, though I knew nothing about MMSS until I got an email from the program after I'd listed math as my anticipated major. I did some research and came to understand how unique the program was, with a focus on bridging math and various social sciences in a way I'd never seen done before. I realized

the incredible learning, preparation, and community that it provided students with, really setting them up for entry into a number of interesting and impressive careers, and I decided that it was definitely something worth being a part of!

How has MMSS prepared you for graduation?

MMSS offers a really valuable and multi-faceted foundation for any sort of analytical career. There is very little (if any) math you'll be asked to do later on that you haven't been introduced to or worked with in the MMSS curriculum. The double-major aspect also offers a really holistic educational experience. I paired MMSS with Psychology and am so grateful for all the exposure I got to different fields of study and for the perspective I developed, finding so many ways that math and psychology connected. MMSS has also allowed me to pursue other nonquantitative interests in social science fields; I have enjoyed taking a number of history, philosophy, and sociology classes at Northwestern, which gave me many opportunities to improve my writing and qualitative analysis. I know that the broad and significant development that I experienced because of MMSS will serve me well as I earn my MBA in the coming years and in whatever professional role I find myself in later on. MMSS surrounded me with like-minded and hardworking students who were both enjoyable to get to know as well as encouraging and helpful to one another in the challenging MMSS coursework.

What have you enjoyed the most about MMSS?

The most enjoyable aspect of MMSS for me was the network of bright and capable individuals within the program. Taking two of your typical four classes every quarter for two years with the same cohort of people means you get to know each other very well. I am so grateful for the friends I made in MMSS as well as for the networking conversations I've had the opportunity to have with MMSS alumni. The community is such an impressive and supportive group of people!

>>> Joshua Gruen '22

Analyst at Deloitte Strategy



Why did you apply to MMSS?

My sister's friend graduated from MMSS and said it was difficult but an awesome opportunity to learn a lot. The combination of rigorous mathematics and economics/political science really spoke to me, but truthfully I did not fully know what I was getting into. Despite

being even more challenging than promised, the program managed to exceed my expectations.

How has MMSS prepared you for graduation?

MMSS prepared me for graduation in multiple ways. Certainly, the academics helped prepare me for the job market, but more importantly some of the classes helped shape my way of thinking about the world. Additionally, the thesis requirement gave me hands-on experience working with real-world data and helped me build confidence in interpreting the world around me.

What have you enjoyed the most about MMSS?

What I appreciated most about MMSS was the collaborative nature of my peers. The small class sizes with a consistent group of students allowed me to build close friendships and bonds with others. Despite many of the classes being very challenging and on a curve, students would help each other without hesitation.



>>> Imai Anabayan '22

Investment Banking Analyst, William Blair



Why did you apply to MMSS?

For myself, I applied ED to Northwestern and found out that I had been admitted. While I was determining what I wanted to study, I came across the MMSS website. From there, I did my research on the program and learned how it provides intense quantitative and mathematical training but does so with an eye toward real world applications. This is what primarily drew me to the program and pushed me to apply. I had enjoyed math in high school, but history and political science courses had been my favorites.

So I knew that I wanted to study something in college that would give me a highly applicable skillset, but also exposure to studying important issues.

How has MMSS prepared you for graduation?

Over my four years at Northwestern, MMSS prepared me both academically and for experiences beyond the classroom. On the coursework side of things, I found that the first year MMSS classes particularly set me up for success. The level of rigor and thinking that those classes required early on prepared me to take on whatever quantitative Economics, Computer Science, or any other courses that followed. By the time I was working on my thesis and ready to graduate, I felt that I had really been battle tested by my coursework and was confident in my ability to solve complicated problems.

Outside of the classroom. I took an interest in finance and more business-oriented fields. I felt that MMSS helped me stand out as I pursued opportunities on campus while also giving me the confidence to explain more complicated concepts in interviews and internships. I have found in my work experiences, that the value of MMSS is in teaching an analytical way of thinking and giving you confidence that you can figure things out. You may not necessarily remember exactly how to take a Lagrangian but the innate confidence that you passed Game Theory and Econometrics is still there. If you could figure that out, you can probably figure out this Excel formatting issue.

What have you enjoyed the most about MMSS?

I have enjoyed many things about MMSS, among which are the professors, the coursework, and of course going through it all with my fellow peers. I made some of my closest friends at Northwestern by meeting them during my first quarter in MMSS. I also had the opportunity to be an MMSS PA which was one of my favorite experiences at Northwestern. Finally, it was also amazing getting to see everyone present on their research in our senior year and see how they applied what we had all learned in their own creative way.

>>> Billy O'Handley '22



Why did you apply to MMSS?

I had always been very into sports but was sadly cursed with a frail little body that often gets knocked over by stiff gusts of wind. Ever since I acknowledged that a life of athletic stardom might not be right for me, I had

been looking for ways to break into the sports world via math. I applied to MMSS because I saw that it would give me the tools to make that sports analytics dream a reality.

How has MMSS prepared you for graduation?

MMSS prepared me for graduation by providing me a place to essentially do what I hoped to do in the professional world. My thesis let me do original research on the way professional MLB teams allocate resources, which is similar to what I would like to do for a baseball team some day. I also was given the econometric and machine learning background to take questions I have about sports and use math to figure out compelling answers.

What have you enjoyed the most about MMSS?

The thing I enjoyed most about MMSS were the classes on game theory. I don't exactly know why, but I really fell in love with game theory at Northwestern, and had genuine fun tackling the problems and challanges I'd see in those classes. And of course I really enjoyed the camaraderie I had with all of my fellow victim—I mean students in MMSS, shout out to my study group for saving my behind time and time again!

Alumni Resources

Northwestern Program in Mathematical Methods in the Social Sciences

Thank You to Our **MMSS Alumni Supporters**

No other undergraduate program in the nation matches the scope, advanced level or degree of integration of social sciences and mathematics. We are thankful for the support that has allowed us to make sure MMSS students are well prepared for the future—whether going on to the graduate school of their choice, being highly sought by Fortune 500 employers, or bringing analytical rigor to traditionally less data-driven fields.

Donating to MMSS

Donations from our loyal and generous alumni help ensure that the MMSS Program continues to provide vital resources to our students such as statistical software licenses, periodic replacement of computer hardware, support for senior thesis research, community building events and more. Donations to MMSS have a positive impact on the Program's intention of providing a rigorous learning experience within a supportive and resourceful community.

Nathan Carl Popkins MMSS Legacy Fund

In addition to a gift to the MMSS Program, alumni and friends can also direct support to The Nathan Carl Popkins MMSS Legacy Fund. This fund was established in 2018 in honor of late MMSS alum Nathan Carl Popkins '01, who embodied a drive and love for math in all facets of his life. In that spirit, the Popkins Legacy Fund is the first permanently endowed fund exclusively dedicated to enhancing the experience of the MMSS students and building a strong, tight knit community of scholars for years to come.

You can designate gifts directly to MMSS through this secure link:

https://giving.northwestern.edu/MMSSnews

Or if you are mailing in a check, please include MMSS or the Nathan Carl Popkins MMSS Legacy Fund on the memo line.

Stay Connected

Due to the MMSS Program's selectivity, the student body is small by design and the average graduating class is 32 students. Since the first students graduated in 1981, there have been approximately 1,300 MMSS alumni. Here are some key ways this community can all stay connected:

LinkedIn

With over 800 members in our "MMSS Northwestern Alumni" LinkedIn Group, it can be a great resource for connecting. To join, visit our LinkedIn Group here, email mmss@northwestern.edu, or search for "MMSS Northwestern Alumni" on LinkedIn.

MMSS Mentorships

Sign up to serve as an MMSS mentor through Northwestern Network Mentorship Program.

Alumni Profiles

Send an update to mmss@northwestern.edu and provide an alumni profile on how MMSS has impacted your life.

Year In Review

Sign up to receive this annual newsletter by sending an email to mmss@northwestern.edu.

MMSS Contacts

Jeff Elv

Director of Mathematical Methods in the Social Sciences Program Email: mmss-director@northwestern.edu

Phone: 847-491-8208

Nicole Schneider

Program Coordinator of Mathematical Methods in the Social Sciences Program

Email: mmss@northwestern.edu

Phone: 847-491-3574