One Hundred Eighty-Fifth Commencement
Saturday, May 13, 2023
Welcome, friends.

COMMENCEMENT EXERCISES

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ORDER OF EXERCISES

Processional
All who are able are requested to stand during the processional.

The Marshals
The Candidates for Degrees
Members of the Board of Managers
Members of the Haverford College Senior Staff and Bryn Mawr College Cabinet
The Faculty
The Platform Party
  The Faculty Marshal
  The Hooding Marshal
  The Dean of the College
  The Opening Speaker
  The Alumni Speaker
  The Honorary Degree Presenter
  The Candidate for an Honorary Degree
  The Secretary of the Board of Managers
  The Provost
  The President of Bryn Mawr College
  The President of the College

Welcome From the President
Wendy E. Raymond

Opening Remarks
Talia Young, Visiting Assistant Professor of Environmental Studies

Remarks From the Class of 2023
Athena Intanate

Remarks From the Alumni
Beverly Ortega Babers, Esq. ‘84, President, Alumni Association Executive Committee

Greetings From Bryn Mawr College
Kimberly Wright Cassidy, President and Professor of Psychology

Remarks From the President
Wendy E. Raymond
Conferring of an Honorary Degree
Joan Cannady Countryman, *Civil Rights and Education Advocate*
Presented by Alice Lesnick, *Director, Bryn Mawr/Haverford Education Program*

Conferring of Degrees
Class presented by Linda Strong-Leek, *Provost, Professor of African and Africana Studies, and Professor of Gender and Sexuality Studies*
Candidates presented by John McKnight, *Dean of the College*

Closing Remarks From the President
Wendy E. Raymond

Recessional

Marshals
Ingrid Arauco, *The Ruth Marshall Magill Professor and Professor of Music*
Laura Been, *Assistant Professor of Psychology*
John Dougherty, *Associate Professor of Computer Science*
Andrew Friedman, *Associate Professor and Chair of History*
Rachel Hoang, *Associate Professor of Biology*
Alexander Norquist, *Professor and Chair of Chemistry*
Anne Preston, *The John Hurford Professor and Professor and Chair of Economics*
Zainab Saleh, *Associate Professor and Chair of Anthropology*
Jeffrey Tecosky-Feldman, *Senior Lecturer of Mathematics and Statistics*
Helen White, *The William H. and Johanna A. Harris Professor in Environmental Studies and Chemistry, Professor of Chemistry and Environmental Studies, and Associate Provost for Curricular Development and Research*
Kelly Gavin Zuckerman, *Visiting Assistant Professor of Education*
Nathan Zullinger, *Hooding Marshal, Assistant Professor of Music, and Director of Choral and Vocal Studies*

Music for Processional and Recessional
Brass Ensemble: Jon Fowler, *tuba*; Jon Clark, *horn*; Ed Jakubowski and Alex Schmauk, *trumpets*; Brad Ward, *trombone*
Since 1858, Haverford has awarded honorary degrees in recognition of those whose lives and work speak of the College’s mission and values. Honorees are selected by a committee of students, faculty, staff, and alumni representatives; the number of recipients each year varies. This year, at the 185th Commencement ceremony, the College awards an honorary degree to Joan Cannady Countryman, an iconic figure in civil rights and education in Philadelphia and beyond, in recognition of her service to humanity.

Joan Cannady Countryman
The first African American graduate of Germantown Friends School (GFS), in 1958, Joan Cannady Countryman is a Quaker activist and educator committed to the struggle for a better world. After undergraduate study at Sarah Lawrence College, she earned a graduate degree in urban planning from Yale University and pursued a Fulbright scholarship at the London School of Economics. The early ‘60s also brought involvement in the Northern Student Movement, a group founded by her husband, Peter Countryman, to, in her words, “persuade college campuses to support the southern student civil rights movement and to educate northern students about racial disparities in their own communities. Many of us on New England campuses, well aware of the sit-ins in the south, were hungry to be part of the new movement.”

Countryman would go on to teach mathematics at GFS for 23 years, before her work as a teacher and administrator—as head of school at the Lincoln School in Rhode Island—led to her role in creating the Oprah Winfrey Leadership School for Girls in South Africa.

A former member of the Board of Managers at Haverford, she has also served as Clerk of the Corporation of the College and, more recently, has spoken out about the advantages of city living for older people while creating communities where residents can age in wise and healthy ways.
PRIZES, AWARDS, AND FELLOWSHIPS

Anthropology
Presented by the Department of Anthropology

The Wyatt MacGaffey Thesis Award in Anthropology
This award honors the professor emeritus of Haverford’s anthropology department and recognizes one or more outstanding senior theses in anthropology.

Naren Sebastian Roy and Cathy Zhu

Athletics
Presented by the Department of Athletics

The A. W. “Pop” Haddleton Award
Named in honor of the longtime track coach at Haverford, this award recognizes an outstanding contribution to an athletic team by a student who epitomizes perseverance, dedication, and loyalty, and who has not received the recognition that, for example, regular starting players do.

Nathan Wesley Rose

The Gregory Kannerstein 1963 Award
Awarded to one or more students whose combination of outstanding athletic achievement and leadership has been a significant factor in a team’s competitive success, and whose levels of performance have brought distinction not only to the individual and their team but also to the entire athletic program.

Katharine Graham Ference, Abigail Tommy Marquis, Jamie Moreland, and Jahsiah Chosen Noel Moses

The Stephen G. Cary 1937 Award
Given in honor of Haverford alumnus Stephen G. Cary 1937, this award recognizes overall impact on the Haverford athletic program.

Celia Avery Page and Kaila Uyeda

The Varsity Cup
Haverford’s highest athletic award, presented annually to one or more outstanding athletes in the senior class. The criteria for selecting honorees are athletic accomplishment, sportsmanship, and leadership throughout the students’ careers.

Ryan G. Kredell and Kayla Michelle Robinson

The William W. Ambler 1945 Award
Awarded to the graduating senior varsity athlete on the list of nominees who has the highest cumulative grade-point average through seven semesters of college work.

Nathan Wesley Rose

The William Docherty Award for Sportsmanship in Intramural Basketball
Nominated by the referees, this prize winner has shown good sportsmanship and enthusiasm for basketball while completing both Intramural Basketball quarters.

Yiping Hou 2024

Biology
Presented by the Department of Biology

The Ariel G. Loewy Prize for Senior Research in Biology
Established in 2001 in memory of Ariel G. Loewy, professor of biology from 1953 to 2000, this prize is given to one or more graduating seniors in biology whose efforts and accomplishments incorporate the rigor and diligence of experimental science.

Diego Capcha, Oscar D. Garrett, Natalie Rose Olivieri, and Nathan Wesley Rose
The Irving Finger Prize in Biology
Established in 2003 by family, friends, and alumni in memory of Irving Finger, professor of biology from 1957 to 1994, this prize is awarded to one or more graduating seniors in biology for outstanding growth and accomplishment in the major.
Michelle Mae Soberano Panaguiton, Rubí Samanta Rivas Guamán, and Olivia Lilikalani Yoshida

The Marian E. Koshland Prize in Biology
Established in 1997 by biology faculty, College administrators, and Board members, the prize is awarded to one or more graduating seniors who demonstrated outstanding performance in senior research.
Allison Elizabeth Dockman, Megan ViHan Heflinger, and Ivan Atilano Ruiz

Center for Peace and Global Citizenship
Presented by the Center for Peace and Global Citizenship

Center for Peace and Global Citizenship Publicly Engaged Scholar Award
Established in 2019, this award recognizes knowledge production and dissemination that advances peace, social justice, and global citizenship. Preference is given to seniors who have demonstrated capacity to communicate concisely about their research to diverse audiences. Special consideration is given to research questions that emerge through relationships with organizations and networks advancing justice.
Natasha Bansal

Chemistry
Presented by the Department of Chemistry

The American Chemical Society Prize for Scholastic Achievement
Given to the top-ranking senior major in chemistry.
Christina Maye McBride

The Colin F. MacKay Prize
Endowed in honor of Professor MacKay by Garth R. Parker Jr. 1981 and the Rohm and Haas Company. This prize recognizes a member of the senior class majoring in chemistry who has shown the greatest intellectual growth over four years of work in the chemistry department.
Davion Marquise Williams

The George Peirce 1903 Prize in Chemistry
Named in honor of George Peirce 1903 by his parents, Harold and Charlotte C. Peirce.
Caroline Slusar Smith

The Lyman Beecher Hall Prize in Chemistry
Awarded to a graduating senior for outstanding accomplishment in the major coursework and in research.
Nicholas Bayan Mostaghim

Classics
Presented by the Department of Classics

The Class of 1896 Prize in Latin for Sophomores
Awarded to the sophomore who has done the best work in the department.
Chaitan Wong 2025

The Class of 1902 Prize in Latin for First-Years
Awarded to the first-year who has done the best work in the department.
David Dai 2026

The Daniel Gillis and Joseph Russo Prize
Awarded for the best essay in classical studies.
Celine Pak

The Howard Comfort Prize in Latin
Nico Tripeny
The Mark L. Hepps 1979 Prize
Awarded in memory of Mark Larry Hepps 1979, this prize is awarded for diligence in the study of elementary Latin.
Sarah Weill-Jones 2026

Society for Classical Studies Outstanding Student Award
Awarded annually to the Haverford student who made the most distinguished contribution to the study of classics at Haverford, this award is presented by the Haverford faculty under the auspices of the Society for Classical Studies.
Alexander Jacob Neuschotz

The William W. Baker Prize in Greek
Celine Pak

College Fellowships
Presented by the Faculty

The Clementine Cope Fellowship
Given in honor of Thomas P. Cope, a former member of the Board of Managers, this fellowship and these prizes are to be used for graduate study at another institution.
Fellowship: Karla Sofia Garcia 2021
Prizes: Tomás Aramburu 2019 and Ngoc “June” Hoang 2021

Comparative Literature
Presented by the Department of Comparative Literature

The Laurie Ann Levin Prize
Awarded to the senior major whose work merits recognition for intellectual achievement.
Celine Pak

East Asian Languages & Cultures
Presented by the Bi-College Department of East Asian Languages & Cultures

The Margaret Mayeda Petersson Prize in Asian Studies
Awarded to a senior major in recognition of achievement in the study of East Asia.
Wenyun Wang

Economics
Presented by the Department of Economics

The Holland Hunter 1943 Economics Department Thesis Prize
Awarded to the senior whose thesis displays the most outstanding empirical and/or theoretical applications of economics.
Nathan Kenneth Haberman McGinty

The Michael M. Weinstein Prize in Economics
Established in 1986.
Rishabh Golchha

English
Presented by the Department of English

The Ian Walker 1950 Prize Fund in English
Established by family, friends, and classmates of Ian Walker 1950, this prize is awarded to a Haverford junior or senior majoring in English.
Nicholas Frank Lasinsky
The Newton Prize in English Literature
Awarded on the basis of final honors in English.

Reese Yau

The Terry M. Kreiger 1969 Memorial Prize
Awarded to the senior demonstrating the greatest achievement in writing during the junior and senior years.

Michiko Ng

The William Ellis Scull 1883 Prize
Awarded to the junior or senior who has shown the greatest achievement in voice and expression of the English language.

Sophia Honigfeld

Environmental Studies
Presented by the Department of Environmental Studies

Environmental Engagement Award
Awarded to graduating seniors who demonstrate outstanding dimensions of environmental engagement and interdisciplinarity, with particular emphasis on crossing or combining modes of inquiry; demonstrate boldness, braveness, and community engagement; and exemplify love and commitment to working with people as well as with land, animals, plants, and other non-human life beyond campus boundaries.

Ebony E. Graham and Charlie Burke Mamlin

History
Presented by the Department of History

The History Department Senior Thesis Prize
Awarded in recognition of the senior project that best exemplifies the passion, commitment, and professionalism of the historical enterprise.

Rhea Jay Chandran

The Samuel Parry Lippincott 1886 Prize in History
Jessica Lauren Israel and Catherine Grace Tomson

The Senior History Prize
Awarded in recognition of achievement in the study of history.

Nicolas Frank Lasinsky and Ella Beatrice Namour

Latin American, Iberian, and Latinx Studies
Presented by the Department of Latin American, Iberian, and Latinx Studies

The Gridley McKim-Smith Senior Research Prize
The Gridley McKim-Smith Senior Research Prize is awarded by the Haverford, Bryn Mawr, and Swarthmore Programs in Latin American, Iberian, and Latinx Studies. It recognizes the achievements of students whose scholarship demonstrates the intellectual rigor and interdisciplinary breadth notable throughout Gridley McKim-Smith’s illustrious career in the Bryn Mawr Art History Department.

Juliana Mendes Brinn, Fabiola Francisca Martinez Cabrera (Bryn Mawr College), and Higinia Flores Rosas (Bryn Mawr College)

The Libraries
Presented by the Libraries Staff

The Libraries Research Award
Recognition for exceptional research in the thesis.

Celine Pak
Linguistics
Presented by the Tri-Co Department of Linguistics

*The Linguistics Prize in Linguistic Theory*
Awarded to the senior whose thesis best addresses theoretical issues in linguistics.

**William Ball**

*The Linguistics Prize in Descriptive Linguistics*
Awarded to the senior(s) whose thesis best addresses descriptive issues in linguistics.

**Caroline Gihlstrorf** and **Jasper Nash**

*The Linguistics Prize in an Experimental Topic*
Awarded to the senior whose thesis best addresses experimental issues in linguistics.

**Ella Wei** (Swarthmore College)

Marian E. Koshland Integrated Natural Sciences Center
Presented by the Departments of Biology and Chemistry

*The Arnold and Mabel Beckman Foundation Award*
Recognizes one or more outstanding undergraduate students in chemistry and biological sciences.

**Oscar D. Garrett** and **Christina Maye McBride**

Mathematics
Presented by the Department of Mathematics and Statistics

*Class of 1896 Prize in Mathematics*
Awarded to the sophomores who have done the best work in the department.

**Sophie Gardiner** and **Samuel Evan Ross**

*The Department Prize in Mathematics for First-Year Students*
Awarded to the first-year student(s) who received the highest score on the annual math prize exam.

**Will Bender 2026** and **Hongyi Zhang 2026**

*The Mathematics and Statistics Senior Thesis Prize*
Awarded in recognition of the senior projects that best exemplify commitment, independence, and clarity of mathematical or statistical exposition.

**Benjamin Zbar Meyers, Alfredo Rafael Ortiz de la Rosa,** and **Bianca Carmelita Teves**

Music
Presented by the director of the Chamber Music Program

*The Sylvia Glickman Chamber Music Prize*
The Sylvia Glickman Chamber Music Prize is awarded to the top graduating seniors who were enrolled in the Bi-College Chamber Music Program throughout the duration of their tenure at Haverford College. This award honors the seniors who have displayed leadership, commitment, commitment, innovation, and improvement during their tenure in the program.

**Margaret Adger Bowen, Bianca Carmelita Teves,** and **Clarice Xu**

Peace, Justice, and Human Rights
Presented by the Program of Peace, Justice, and Human Rights

*The PJHR Award for Engaged Scholarship*
Awarded to the graduating senior whose justice-oriented work in the concentration has been academically rigorous while also attuned to the importance of communicating ideas to people with different views and forms of training. Recipients of this award have mastered both disciplinary and interdisciplinary forms of excellence.

**Madeline Elizabeth Webster**
The PJHR Award for Ethical Action
Awarded to the graduating seniors who have lived the values of peace, justice, and human rights both in
the classroom and in the world beyond campus in an exemplary fashion. Recipients of this award have
put their principles into action and made a positive impact in the larger world by engaging directly with
communities impacted by injustice or inequality.
Rachel Rock Schiffer and Janani Suresh

The Elizabeth P. Smith Prize
Established in 1915 by bequest from Elizabeth P. Smith, this prize honors the best essay on peace.
Trinity Kleckner

The Elliston P. Morris 1848 Prize
Founded in 1906 by a gift of $1,000 from Elliston P. Morris 1848, this prize honors the best essays on
the subject of arbitration and peace.
Inteemum Ahsan 2024 and Michelle Tran

Philosophy
Presented by the Department of Philosophy

The Charles Schwartz 1979 Memorial Prize in Philosophy
Awarded in recognition of Chuck Schwartz 1979, this prize is given to the student whose senior essay
best exemplifies the care, precision, and creativity demonstrated by the senior project of Chuck Schwartz.
Hikaru Jitsukawa

The Departmental Prize in Philosophy
Recognizes the student who has made the most significant contributions to the vitality of the
philosophical community, both within the classroom and beyond, while majoring in philosophy.
Lara Elizabeth Deuber

Physics and Astronomy
Presented by the Departments of Physics and Astronomy

The Faculty-Student Collaborative Research Prize
Funded by the Boughn-Gollub-Partridge Fund for Faculty-Student Research in Astronomy and Physics,
this prize awards funds in support of research conference attendance to present research based on the
senior thesis, or for research with Physics and Astronomy Department faculty.
Jack Henry Crump and Emmy Wisz

The Louis B. Green Prizes in Physics and Astronomy
Awarded in honor of Louis B. Green (1911–99), a professor of astronomy and College administrator
who inspired generations of students, these prizes are given to the graduating students who have gone
above and beyond in their contributions to research and/or department culture and events. Established
by Charles Ufford, a Haverford College parent.
August Muller, Ashley Schefler, Shi Jie Samuel Tan, and Eva M. White

Political Science
Presented by the Department of Political Science

The Emerson L. Darnell 1940 Prize
Presented in honor of Emerson Darnell, a Quaker alumnus who dedicated his life’s work to advocating
peaceful social change and defending the civil rights of the individual. The prize is awarded annually
to the student who presents the best paper demonstrating an appreciation of the Bill of Rights as the
Madeline Rosen
The Harold P. Kurzman 1958 Prize
Awarded to the senior who has performed the best and most creatively in political science coursework.
**Ryan William Murphy**

The Harvey Glickman Prize
Presented in honor of Harvey Glickman, a professor of political science at Haverford for 43 years and an esteemed political theorist. Awarded to the graduating senior in political science whose senior thesis displays the greatest innovation in pushing the theoretical boundaries of the discipline and its subfields. Established by the Political Science Department in 2019.
**Natasha Bansal**

The Herman M. Somers Prize in Political Science
Given in recognition of the research and teaching of Red Somers. Awarded to the graduating senior who presents the best senior project that reflects the interest in policy, respect for evidence, and the humane concern for improving society that characterized Somers’ work.
**Ryan William Murphy**

The Stephen H. Miller 1962 Memorial Award
Presented in honor of Stephen H. Miller 1962, who lost his life serving his country and his fellow man in South Vietnam while taking part in village development as a member of the United States Information Agency. This award is presented to the graduating senior in political science who best exemplifies the ideal of political involvement and social service expressed in Miller’s life and career.
**Natalia Marie Barber**

Psychology
Presented by the Department of Psychology

The David Olton 1964 Research Award
Created in memory of David Olton 1964, chair of the psychology department at Johns Hopkins University, who was an energetic and joyous contributor to the field of psychology. The award honors the senior who has done exceptional work and shows great promise in psychology.
**Cathy Zhu**

Registrar
Presented by the Registrar’s Office

The Scholarship Improvement Prize
Awarded to the senior who has shown the most steady and marked improvement in scholarship during their time at Haverford.
**Patrick Coleman**

Religion
Presented by the Department of Religion

The Religion Prize
Awarded to the senior religion majors who presented the best theses.
**Sarah Katharine Brodnax** and **Sophia Madeleine Kaplan**

Spanish
Presented by the Department of Spanish

The Manuel J. and Elisa Pi Asensio Prize
Awarded for the best essays submitted by seniors majoring in Spanish or with a concentration in Latin American, Iberian, and Latinx Studies.
**Anna Madelon Garrison-Bedell** and **Marcos Antonio Padron-Curet**
Students’ Council
Presented by Students’ Council

The Edmund J. Lee 1943 Memorial Award
Recognizes Edmund Jennings Lee, the sole member of the Class of 1943 to be killed during World War II. This award is given to the student organization that has contributed the most toward the furtherance of academic pursuits, extracurricular activities, spiritual growth, or college spirit in individuals or in the College as a whole during the year.

Chemistry Student Group

The John G. Wallace 1957 Class Night Award
Presented to the student who has made the greatest contribution to on-campus performing arts.

Kayla Elaine Baquiran

The Jonathan Mohrig 1986 Memorial Prize
Honors a Haverford sophomore who died in 1984. This prize is awarded to the student at Haverford who embodies Jonathan’s enthusiasm, warmth, humor, and quiet generosity to those around him, and who, like Jonathan, makes a special contribution to the quality of life at Haverford.

Athena Intanate

The Martin Foss Award
Given to the member of the Haverford College community whose life speaks directly to the lives of others by the powerful harmony of intellect, compassion, and courage.

Anna Madelon Garrison-Bedell

The Service Leadership Award
Presented to the graduating senior who will make outstanding contributions to social and/or environmental change through projects or programs of their initiation. The award is designed both to nurture graduating seniors as they begin to dedicate their lives to service action, as well as to develop a network of alumni doing model work in the field.

Seamus Matthew Flannery

The Stephen G. Cary 1937 Award
Given in honor of Stephen G. Cary 1937 and his contributions to the Haverford community, this award is presented to the senior who best exemplifies “honesty, integrity, a healthy combination of scholarly and extracurricular activities, and, most of all, a deep concern not only for those who are a part of the Haverford community, but also for those who are a part of our neighboring communities.” An award of $1,000 is given in the winner’s name to the College for the purpose of financial aid.

Naren Sebastian Roy

The Students’ Council Student Life Award
Presented to the senior who, through hard work, persistence, and concern for their peers, has made the greatest contribution to student life on campus.

Rasaaq Shittu

Faculty and Staff Awards
Presented by Students’ Council

The Students’ Association Award
Presented to a Haverford faculty member who gives outstanding service to the Haverford community and who upholds the qualities intrinsic to a Haverford education.

Kelly Matz, General Chemistry Laboratory Instructor and Coordinator
As of 2021, the Chesick Scholars and Horizons programs have combined to include all first-generation and/or low-income students on Haverford’s campus. Graduating seniors who have chosen to honor this identity are wearing Chesick Scholar stoles over their commencement robes.
Phi Beta Kappa Society

Founded in 1776, Phi Beta Kappa is the oldest undergraduate academic honor society in the United States. The Haverford College Chapter of the Phi Beta Kappa Society of America was chartered in 1898 as Zeta of Pennsylvania. The Haverford chapter is one of 286 nationwide, housed at colleges and universities with academic programs in liberal arts and sciences acknowledged as sufficiently rigorous and intellectually challenging by standards maintained by the national Phi Beta Kappa society.

Individual selection reflects excellence in the liberal arts and sciences and distinction in a broad array of undergraduate courses. At Haverford College, undergraduate members of good character are selected primarily on the basis of academic performance, as expressed in their course grades. The selection committee of alumni and faculty members of Phi Beta Kappa also considers, to the extent possible, the degree of originality, creativity, and imagination of thought; the range of depth of intellectual interests; and the precision and elegance of a student's work. Normally no less than 10 percent and no more than 15 percent of a graduating class are selected.

The Phi Beta Kappa Society supports programs that significantly advance scholarship and academic excellence by awards, lectures, and outreach activities to schools. Membership now numbers more than 500,000 individuals.

The following members of the Classes of 2023 and 2024 have been elected to the Phi Beta Kappa Society.

Members of the Class of 2023 elected during the junior year:
- Mia Alexis Kussman
- Christina Maye McBride
- Carolena Alexander Muno

Members of the Class of 2023 elected during the senior year:
- Lauren Vee Arakelian
- Sarah Katharine Brodnax
- Jack Henry Crump
- Ella Rose Culton
- David Dinh
- Oscar D. Garrett
- Cameron Wheeler Gavaler
- Sarah Gold
- Adena Devra Kibel
- Lauren Elise Kinne
- Benjamin Zeev Klahr
- Anna Malkov
- Lauren Elise Kinne
- Sarah Gold
- Adena Devra Kibel
- Lauren Elise Kinne
- Benjamin Zeev Klahr
- Anna Malkov

Members of the Class of 2024 elected this year:
- Maya Isabelle Antonio
- Isabel Rose Ashford Arya
- Nathan Wesley Rose
- Ashley Scheffler
- Maisie Whitman Smith
- Sarina Marie Smith
- Shi Jie Samuel Tan
- Mackenzie Tygh
- Lucas Doug Jone Voit
- Wenyun Wang
- Yimeng Wang
- Madeline Elizabeth Webster
- Eva M. White
- Cathy Zhu
The senior capstone project is an opportunity for Haverford students to apply the skills, methods, and concepts specific to their major field in the production of new knowledge, the original synthesis of existing knowledge, and/or creative artistic expression. The titles of these theses, performances, and/or fine arts portfolios appear below students’ names. Certain majors also include comprehensive exams, and for some majors offered through partner institutions, a senior capstone project may not be required.

Sarah Miriam Abraham  
Anthropology and International Studies at Bryn Mawr College: Fabricating Race, Culture, and Identity in South East Asian “International” Schools

Selina Adelman  
Growth and Structure of Cities at Bryn Mawr College: Finding New Community: Evolving Japanese-American Identities in the Hoshū-kō with a Minor in Anthropology

Justin William Adler  
Neuroscience: Examining the Effects of Sleep Disturbances on Alzheimer’s Disease Pathology with a Minor in Health Studies

Tazkia Afra  
Computer Science: Exploring the Effectiveness of Conversational Web Browsing with a Minor in Psychology

Kartik Aggarwal  
Economics: The Cost of Skilled Immigration in IT, Finance, and Legal Occupations

Kimberly Ysapy Aguero Martins  
Economics: The Effect of Attention Deficit Hyperactivity Disorder on Labor Market Outcomes with a Minor in French and Francophone Studies

Olivia Catherine Ahart  
Psychology: The Impact of Stress on Inhibition: A Stepwise Methodology with a Minor in Neuroscience

Trisha Ajila  
Psychology: Protective Factors for the Impact of Adverse Childhood Experiences on the Health of First-Year Undergraduate Students with a Minor in Neuroscience

Eleanor Laura Alix  
Neuroscience: Investigating the Potential of the Gut Microbiome as a Novel Therapeutic Target for Attention Deficit Hyperactivity Disorder with a Minor in Economics

Corinne Michelle Beatty Allen  
Biology: Investigating Nuclear Import of Exogenously Introduced Oligonucleotides in Chlamydomonas reinhardtii

Yousef M. Almbaid  
Economics: Citizenship by Investment Programs and Tax Evasion: A Brief History

Lauren Vee Arakelian  
Economics: The Evolution of the Gender Earnings Gap Among Law School Graduates

Andrew J. Arth  
Economics: The Cobalt Supply Chain and Clean Energy Storage in the U.S.: A Review with a Minor in Political Science at Bryn Mawr College

Anna Karina Avanesyan  
History: Imagining the Ottomans: Appropriations of the Ottoman Empire in 18th-Century France with a Minor in Spanish

Natasha Bansal  
Political Science: Collaboration Is Key: The Impact of Immigrant-Led Grassroots Activism on the Passage of Progressive Redistributive Policies in San José, California Spanish: Lengua y poder: El uso del español en los discursos políticos estadounidenses

Kayla Elaine Baquiran  
Natalia Marie Barber  
Political Science: *Lives Rebuilt: The Challenges of Reintegration for Returning Mexican Migrants*  
Spanish: *Las distopías críticas y el desarrollo de comunidades de resistencia en las novelas* *Ink y Lunar Braceros: 2125–2148*  
with a Concentration in Latin American, Iberian, and Latinx Studies

Dahlia Claire Barton  
Anthropology: *COVID-19’s Effect on Haverford College: Who Were We, Who Are We, and Where Do We Want to Go?*  
with a Minor in Philosophy

Zachary Yun Becker  
Mathematics: *Optimizing Pitching-Substitution Strategy Using a Markov Chain Model*  
with a Minor in Economics

Andrew Beltran  
Spanish: “*El caballo! La pistola! Las Copas!*: Un discurso de masculinidad mexicana durante los ’50s

Dalia Rue Bercow  
Biology: *Investigating the Chemical Communication Between Tropical Eusocial Wasps and Army Ants*  
with a Minor in Environmental Studies

John Oliver Bergeron  
Neuroscience: *How Does MDMA Affect the Brain to Reduce the Severity of PTSD?*

Ana Sofia Bernal McCracken  
Neuroscience: *How Does Early-Life Loss of Hearing Affect the Development of Attention Disorder Symptoms?*  
with a Minor in Economics

Amolina Bhat  
Philosophy: *Uneasiness in the Museum: The Affective Subjectivity and Openness of Art Interpretation*  
Sociology: *The Intersections of Civil Religion, Secularism, Hinduism, Islam, and Christianity: The Case of Modern-Day India*

Margaret Adger Bowen  
Biology: *Compatibility and Engineering of Type II Polyketide Synthase Enzymes*  
Music: *A violin performance of works by Brahms, Debussy, Coleridge-Taylor, Bach, and Saint-Saëns*

Aaron S. Bratt  
Mathematics: *On Minimizing the Nonorientable 4-Genus of Whitehead Doubles*  
with a Minor in History at Bryn Mawr College

Maxwell Isaac Diamond Brepig  
History: *Vasily Golovnin’s Captivity Narrative in the Kurile Islands 1811–13 and Russo-Japanese Relations*

Juliana Mendes Brinn  
History: *A Recipe for Cannibal Pâté: Indigenous Peoples and Representation in 20th-Century Brazilian Modernist Art*  
with a Concentration in Latin American, Iberian, and Latinx Studies

Sarah Katharine Brodnax  
Anthropology and Religion: “*We Are the Church*: Forging Catholic LGBTQ Ministries Amidst Institutional Silencing

Sarah Adelle Brown  
Psychology: *Developing a 3D Object Categorization Paradigm for Adult Long-Evans Rats*  
with Minors in Chinese Language and East Asian Languages and Cultures

Peter Buckley  
Philosophy: *Wilfrid Sellars, Language Acquisition, and the Necessity of Joint Awareness*  
with a Minor in Religion

Simon Byrne  
Mathematics: *A Logistic Regression to Compare Regular-Season NHL Data to Postseason Results*

Diego Capcha  
Biology: *Elucidating the Protein Targets of Antimicrobial Compounds Secreted by Streptococcus pneumoniae*

Emrys Chalfoun  
Linguistics: “*Wild Eyed Socialist*: The Use of Rhetorical Tools in Republican Speeches”  
with a Minor in Sociology
Rhea Jay Chandran
History: Subject to Reform: Race, Caste, and the Gendered Governance of Female Sexuality in Late Colonial India (1887–1929)

William John Robertson Chartener
Mathematics: A Two-Part Approach to Airline Crew Scheduling

Hannah Mia Chayet
Classical Culture and Society: "War Shall Be the Business of Womenfolk!": An Analysis of Women's Rhetoric and Political Engagement in Lysistrata and Assemblywomen with a Concentration in Gender and Sexuality Studies

Junyi Chen
Mathematics: Topics in the One-Dimensional Discrete Dynamical System and Fractals with a Minor in Economics

Tsenguun Chinzorig
Psychology: Redesigning Haverford College's Counseling and Psychological Services (CAPS) Website Through the Application of UX Design Principles with a Minor in Computer Science at Bryn Mawr College

Peter Christians
Economics: Intra-Industry Trade in Financial Services: An Empirical Study on the United States and Its Trade Partners

Ashley Chun
Psychology: Exploring Bottom-Up Ethnic-Racial Socialization in Asian American Immigrant Families with a Minor in Philosophy

Magnolia P. Clayton
Independent Major in Education: Accessibility and Equity: Pursuing Education as Liberating Practice with a Concentration in Peace, Justice, and Human Rights

David Andrew Christopher Cole
Environmental Studies: Carbon Sequestration Potential of No-Till Farming

Patrick Coleman
Economics: An Analysis of Whether There Exist Consistent Biases Made in Major League Baseball Organizations During the Draft with a Minor in Spanish

John Vincent Collins
Mathematics: A Statistical Analysis of European Cycling Grand Tours

Jude Correll

Leo Tone Costa
Psychology: The Impact of Multilevel Acute Stress on Behavioral Inhibitory Control: An ERP Study with a Minor in Data Science at Bryn Mawr College and a Concentration in Film Studies at Swarthmore College

Paul-Andre Coulibaly
Political Science: Politics in the FIFA World Cup

Zachary Tyler Crampton
Computer Science: The Application of Reinforcement Learning for National Football League Sports Gambling

Quinton Ayres Crawford
Philosophy: Is Psychological Egoism Obviously False? An Evaluation of Arguments for and Against Psychological Egoism with a Minor in Economics

Edna May Creelman
Sociology: Fiduciary Care and the Necessity of Physician Autonomy: The Dilemmas of End-of-Life Care in Contemporary Health Care Institutions with Minor in Philosophy

Jack Henry Crump
Physics: Cosmological Variation of the Fine-Structure Constant with Minors in Astronomy, German and German Studies, and Mathematics, and a Concentration in Scientific Computing

Ella Rose Culton
Environmental Studies: "It's the Pits!": Imaging of Lepidophloios and Lepidodendron, Arborescent Lycopsid Tracheids with a Minor in Biology at Bryn Mawr College

Sydney Nicole Cummings
Psychology with a Minor in Anthropology
Julia Rose Curran  
Computer Science: Studying Graph Centralities in Predicting a Player’s Importance to a Team  
with a Minor in Economics

Claire Cywes  
Biology: Investigating the Cytotoxic Effect of the Novel Marine Bacterial-Derived Fatty Acid Antibiotic (Z)-13-methyltratra-4-deconoic Acid on Mammalian Cells  
with a Minor in Health Studies

Charlotte Dagones  
Cognitive Science at Swarthmore College

A. Eric Dahlberg  
Computer Science: Twitter Users’ Political Ideology Change Over Time

Xufeng Caesar Dai  
Computer Science at Bryn Mawr College: Decoding Inner Thoughts: Extracting Task-Specific Neural Features From Inner-Thoughts Electroencephalogram (EEG) Signal With Minimum Spanning Tree (MST)  
with a Minor in Mathematics

Thomas Neal Dandino  
Physics: Signals of Failure in the Contact Force Network

Ian Davis  
Psychology: Duck, Duck, Dominance: Group-Status Identity as a Predictor of Social Dominance Orientation in Children  
with a Minor in Statistics

Marisleysis De La Cruz  
Computer Science: Making Computer Science Education Accessible to Blind and Visually Impaired Students  
with a Minor in Gender and Sexuality Studies

Logan Pierre de Raspide Ross  
Astrophysics: Delensing the Cosmic Microwave Background

Luca Mello  
International Studies at Bryn Mawr College  
with a Minor in Economics

Hilda Delgado  
History of Art at Bryn Mawr College: Porcelain, Pottery, and Protest: Roberto Lugo’s Trans-Temporal Visions of Art and Activism for the 21st Century

Emmy Delormes  
Environmental Studies: A “How-To” Guide on Starting a Community Garden for Nonprofit Organizations  
with a Minor in Economics

Celine Demir  
Economics: Health Aid and Health Outcomes in Sub-Saharan Africa  
with a Minor in Health Studies

Yongtao Deng  
Mathematics: Lower Bounds on 4D Crosscap Numbers for Rational Knots  
Physics: Topological Edge States in Topological Materials

Yuheng Deng  
East Asian Languages and Cultures: The Visual Politics: Word and Image in Republican-Era Propaganda Broadsheets  
with a Minor in Japanese Language

Lara Elizabeth Deuber  
Mathematics: Using Data From Metroplex Areas to Understand Voting Changes in the 2020 Election  
Philosophy: Truly Seeing Mathematics: An Exploration of Mathematical Aspects Through Ability, Skill, and Expertise

Xavier DeVore  
Computer Science: Open Data and Accessibility

Ash DiCristofalo  
Biology: The Endosymbiont Bacteria Wolbachia Localizes Near the Astral Microtubules Within Multiple Species of Drosophila, and the Staining Procedure Has Also Been Improved by Development of a Low-Cost Fly Embryo Strainer  
with a Minor in Classical Culture and Society

David Dinh  
Computer Science: Simulating Smoke on the GPU

Tung Nguyen Do  
Computer Science: Approaches to Unweighted and Undirected Graph Cut Sparsification

Allison Elizabeth Dockman  
Biology: Acer saccharum Extracts Ameliorate the Huntington’s Disease Phenotype in a Caenorhabditis elegans Model  
with a Minor in Health Studies
Caroline Adelina Donado  
Economics at Bryn Mawr College: The Effects of the Pandemic on Underperforming Students in Low-Income Schools: Evidence From Pennsylvania with a Minor in Visual Studies

Rebecca Paige Donahue  
Neuroscience: The Impact of Stress on Response Inhibition: A Stepwise Manipulation of Exposure with a Minor in Psychology

John Dvorak  
Biology: Adapting a Drug-Inducible System to Investigate Temporal Requirements of the Adaptor Protein 2 Complex in Zebrafish with a Minor in Neuroscience

Aldan Dye  
Chemistry: Discovery of New Ruddlesden-Popper Materials Using High-Throughput Techniques

Jason Brian Edmonds  
Economics: The Effects of Tournament Incentives, Ability, and Experience on Clutch Performance: Evidence From the ATP Tour with a Minor in Psychology

Ethan Gabriel Zev Ezray  
Sociology at Bryn Mawr College: “I Can See Your Halo Effect”: The Relationship Between Norms Around Attractiveness and Social Status with a Minor in Child and Family Studies at Bryn Mawr College

Li Fan  
Computer Science: Deep Learning for Statistical Parameter Estimation  
Mathematics: Principal Component Analysis with a Minor in Statistics

Chih Han Fang  
Psychology: A Mixed-Methods Longitudinal Investigation of College Turning-Point Narratives with a Minor in Japanese Language

Katharine Graham Ference  
Mathematics: Fighting Cancer: Can Differential Equations Provide the Punch?

Seamus Matthew Flannery  
Physics: Horizon Crossing Navigation Around Jupiter with Minors in Fine Arts and Computer Science at Bryn Mawr College

Michael Franco  
Computer Science: The Alternate Text Dilemma: Analyzing the Effectiveness of Automatic Image-Captioning Systems for Blind or Visually Impaired Users

Sophie Rose Frem  
Physics: Systematically Studying the Effects of Foot-Substrate Interactions on Robot Locomotion with Minors in Astronomy and Fine Arts

Julian Nathan Frost  
History: “Entirely New Solutions”? Modernist Visions of the City During the Reconstruction of Nantes (1943–55)  
Growth and Structure of Cities at Bryn Mawr College: “L’urbanisme à la nantaise”: Lessons From the Forefront of French Participatory Democracy with a Minor in French and Francophone Studies

Shriya Anurati Fruitwala  
Environmental Studies: Gardening for Dummies: A Community Guidebook for Building a Box Garden  
Mathematics: On Thin Ice: Modeling Ice Sheets With the Shallow Ice Approximation

Joshua Allen Fuller  
Biology: Editing the Chloroplast Genome of Chlamydomonas reinhardtii via Oligonucleotide-Directed Mutagenesis with a Minor in Chemistry and a Concentration in Biophysics

Yujia Gan  
Mathematics: Choice Axioms and Baire Space

Oscar D. Garrett  
Biology: Parsing the Biomolecular Basis on Which a Bacterial Signaling Molecule Induces Cellular Arrest and Protection From Virus-Induced Mortality in Emiliania huxleyi with a Minor in Environmental Studies and a Concentration in Biochemistry

Anna Madelon Garrison-Bedell  
Spanish: Desde Filadelfia hasta California sureño: los huertos comunitarios migrantes como sitios para la preservación y la reproducción cultural mexicana with a Concentration in Latin American, Iberian, and Latinx Studies

Cameron Wheeler Gavaler  
Mathematics with a Minor in Computer Science at Bryn Mawr College
Joanna Morgan Gengo
Neuroscience: Stress and Inhibitory Control: Investigating the Potential for a Nonlinear Relationship

Joseph Anthony Gentile
Computer Science: Reaching the Shannon Limit: A Review of Polar Codes with a Minor in Transnational Italian Studies at Bryn Mawr College

Joshua Macgregor Gerstein
Sociology: Towards a Theory of Fascism: The Rise of the Nazis

Caroline Gihlstorf
Computer Science: Representing Negation and Compositionality in Neural Models for NLP Linguistics: Towards an Explanation of “Optional” Resumptive Pronouns in Colonial Valley Zapotec and Macuiltianguis Zapotec Relative Clauses

Gabriela Jie yin Godin
Neuroscience: Activation of Locus Coeruleus Calcitonin Receptors Suppresses Food Intake Without Inducing Illness-Like Behaviors

Rishabh Golchha
Economics: Mathematics at Bryn Mawr College: Does Congress Influence Federal Reserve Policy? Evidence From Shared Allegiance and Election Periods

Sarah Gold
Linguistics: The Morphology, Syntax, and Binding Properties of Zapotec Pronouns Mathematics: Crystal Structures on Key Polynomials

Deniz Gonen
Growth and Structure of Cities at Bryn Mawr College: Pastoral Fantasies, Urban Realities: A Study of Campus Expansions at New York City Universities with a Minor in Economics

Maya Gong
Mathematics: The Budyko Energy Balance Model With Dynamic Heat Transport with a Minor in Environmental Studies and a Concentration in Scientific Computing

Hedy Tetschner Goodman
Astronomy and Physics: Astronomical Observatories: Case Studies in Architecture and Design with a Minor in German and German Studies

Rowan John Mc Nelis Goudy

Molly McIntyre Gouran
History: Ybor City’s Columbia Restaurant—From Cigar Capital to Urban Renewal: The Ethnic Entrepreneur with a Minor in Psychology

Ebony E. Graham
Environmental Studies: Returning the People to the Land: An Exploration of Black Americans’ Relation to the Natural World in the Past and Present with Minors in Educational Studies and Africana Studies at Bryn Mawr College

Rafael Giovanni Grossman-Naples
Political Science: The Legality of American Vigilantism: An Argument Against the Claim of Extralegality with a Concentration in Peace, Justice, and Human Rights

Amanda Halliday
Neuroscience: The Effects of Peripartum Estradiol Fluctuations on Mesolimbic Dopamine Dynamics with a Minor in Psychology

Lauren T. Handler
Psychology: Explanations for Why W.E.I.R.D. Brains Are Hard to Study: Exploring the Barriers in Collecting and Reporting Racial Demographics in the Field of Cognitive Neuroscience with a Minor in Health Studies

Bilikisu O. Hanidu
Neuroscience: How Early-Life Nociceptive Pain in Preterm Infants Affects Long-Term Cognitive Processing with a Minor in Psychology

David Witmeyer Harris
Political Science: Analyzing the Public vs. Private Factor: The Creation of COVID-19 Policy in Higher Education Institutions in the United States During the 2020–21 Academic Year with a Minor in History at Bryn Mawr College

Megan ViHan Heflinger
Biology: Characterization of mRNA Regulatory Regions Sufficient for YBX3 Post-Transcriptional Control with Minors in Fine Arts and Child and Family Studies at Bryn Mawr College
Matthew Brent Heim  
Economics: Major League Soccer’s Search for Talent: Do Elite Leagues Always Produce Elite Players?

Jared Charles Oliver Heller  
History: A Hunger to Survive: The Holocaust and the Jewish Food Journey 
with a Minor in East Asian Languages and Cultures

Augustus William Boone Helson  
Physics: Granular Contact Force Network Evolution by Randomized Microimpaction 
Mathematics at Bryn Mawr College: Mathematical Principles Behind the Physics of Photoelasticimetry

Lia Danielle Herzig  
Neuroscience: NMDA Receptor Antagonism Effects on Recognition Memory in Periadolescent Long-Evans Rats 
with a Minor in Health Studies

Savidya Dilni Hettiarachchi  
Biology: Tau Pathology Independently Induces Ferroptosis in a Genetic Model of Alzheimer’s Disease 
with a Minor in Linguistics and a Concentration in Biochemistry

Carly Hill  
Environmental Studies: Transforming the Ardmore Victory Gardens Guidebook 
with a Minor in Geology at Bryn Mawr College

Bethany Ka-Yan Ho  
History: “This Fatal Accident”: Suicide and Punishment in 18th-Century England 
with a Minor in Linguistics at Bryn Mawr College

Drew Hoffman  
Economics: Greening the Grid: Assessing Policy Incentives Across U.S. States 
with a Minor in Environmental Studies

Matthew Hogenauer  
Biology: Screening Epigallocatechin-3-Gallate and Curcumin for Synergistic Protective Effects in a Caenorhabditis elegans Model of Huntington’s Disease 
with a Minor in Health Studies

Jaclyn Holtby  
Biology: Characterizing Essential Regions for YBX3’s Post-Transcriptional Regulation 
with Minors in French and Francophone Studies and Health Studies

Sophia Honigfeld  
English: “What All Spirits We’d Move”: Black Feminist Choreopoetics of Haunting and Healing in For Colored Girls Who Have Considered Suicide/When the Rainbow Is Enuf 
with a Minor in Educational Studies

Emily Mae Hsiang  
Music: An original composition entitled Franny: A Musical 
Anthropology at Bryn Mawr College: Thinking One Step Ahead: Women’s Awareness of Gender Difference in Workplace Communication

Lingxi (Lindsey) Hua  
Economics: Are People More or Less Risk-Averse in Groups? 
with Minors in Psychology and Statistics

Lilian Huang  
Chemistry: Life, Death, and the Chemistry of Tattoos: A Review on Tattoo Pigment Degradation and Toxicology 
with a Concentration in Biochemistry

Katherine Mary Lucinda Hueston  
Political Science: Are Rural Massachusetts Communities “Bowling Alone”? An Investigation of Civic Engagement, Political Participation, and Partisanship in the Massachusetts Hilltowns 
with a Concentration in Peace, Justice, and Human Rights

Madison Hujber  
Neuroscience: Bipolar Disorder, Mindfulness, and Psilocybin 
with a Minor in Health Studies

Aidan Hutchinson  
Psychology: The Interaction Between Mind Wandering and Dysphoria 
with a Minor in Religion

Athena Intanate  
English: Beyond the Margin: The Reconstruction of Cultural Memory Through Image-Poem in Silent Anatomies 
Spanish: Intimidades coloniales: El rol del realismo mágico en “La increíble y triste historia de la cándida Eréndira y su abuela desalmada” de Gabriel García Márquez 
International Studies at Bryn Mawr College: “Have You Eaten Yet?” The Gastropoetics of South East Asian American and East Asian American Communities
Calais Irwin

Jessica Lauren Israel
History: A Battle for the Neighborhood: The 1917 Philadelphia Sugar Strike and Food Boycott

Hikaru Jitsukawa
Mathematics: A Polygonal Characterization of the Bruhat Interval in Affine S3
Philosophy: The Stages on Which We Play: Critical Phenomenology and Theatrical Interpellation

Sophia Madeleine Kaplan
Political Science: Abortion Advocacy in Crisis: Pro-Choice Interest-Group Formation and Mobilization in Response to Dobbs v. Jackson
Women’s Health Organization
Religion: Sacred Work and Religious Duty: How the Clergy Consultation Service on Abortion Used Normative Religion and Secularism Arguments to Elevate the Pre-Roe Abortion Advocacy Movement as Legitimate Religious Actors

Katalina Kastrong
Anthropology and Linguistics: Quaker Interpretation: The Role of Communication and Identity in the Production of Quaker Values

Eleanor Claire Keating
Spanish: Género, naturaleza y cine: La búsqueda del límite de la violencia del conflicto armado colombiano en La Sirga y Alias María with a Minor in Environmental Studies

Alexander Henry Keegan Jiganti
History: The First Anglo-Mughal War—Lessons Learned in Defeat: Sea Power, the Embrace of Fortification, and the Development of Deterrence with a Minor in Economics

Omar Mohamed Kenawy
Anthropology: Between Worlds: The American Muslim Experience in Eastern Pennsylvania Environmental Studies

Nicholas Gary Kerkorian
Economics: Friendly Fire: The Impact of Team Pressure on Biathlon Shooting Performance with a Concentration in Mathematical Economics

Filip Karol Kesicki
Economics: The Impact of Special Economic Zones and the Polish Investment Zone Program on the Polish Labor Market with a Minor in Spanish

Faizah Khan
Computer Science: Beyond the Visible: Computer Science Students Living With Mental Health Conditions

Adena Devra Kibel
Philosophy: Present Hope: A Possible Means for Living With and Understanding Camus’ Absurdism
Spanish: Las palabras de pertenencia: Un examen del uso del lenguaje en Las genealogías por Margo Glantz

Nikki Kingsland
Economics: How Extending Foster Care in Florida Affects Educational and Economic Outcomes of Foster Youth During the Transition to Adulthood International Studies at Bryn Mawr College

Lauren Elise Kinne
Biology: A Question to Keep You Up at Night: How Does Circadian Rhythm Disruption Affect C9orf72 Dipeptide Repeat Accumulation and Aggregation in Drosophila melanogaster?

Anna Mershon Kirn
Biology: Investigating the Genetic Basis for Oligonucleotide Directed Mutagenesis Efficiency in Chlamydomonas reinhardtii with a Minor in Psychology

Benjamin Zeev Klahr
Mathematics: Survival Analysis: Methods and Applications of Time-to-Event Data Analysis

Hannah Marie Kolzer
Classical Languages: Reading the Mountains of Rome: Understanding the Transgressive Landscapes of Statius’ Thebaid with a Minor in Linguistics

Ryan G. Kredell
Economics: The CARD Act’s Impact on Consumer Debt with a Minor in Psychology

Dylan Kupetsky
Physics: Comparing Two Methods for Reconstructing Free Energy Environments with Minors in Environmental Studies and Mathematics
Mia Alexis Kussman
Psychology: “Why Am I Still With You?”: The Role of Implicit Theories of Relationships in Predicting Commitment to an Unfulfilling Relationship with Minors in Linguistics and Data Science at Bryn Mawr College

Zachary Holbrook Landry
Mathematics: Optimizing MLB Free Agency With the Genetic Algorithm

Nicholas Frank Lasinsky
English: “We Are Not Dead, But Sleeping Here”: Exhuming Critique, Community, and Care in 19th-Century Obituary Poems
History: Copper’s Care: Public Welfare, Paternalism, and Worker Expression in a Michigan Company Town

Abraham Levin
Mathematics: Modeling Perfect Play in “Cookie Clicker” Using Shortest-Path Algorithms with a Minor in Economics

Sasha Levina
Astronomy and Physics: Applying Wind Roche-Lobe Overflow in Binary Evolution Using MESA and POSYDON with a Concentration in Scientific Computing

Zara Elena Levy
Psychology: “I’ll Be Watching You”: The Mediating Role of Jealousy and Trust Between Attachment and Surveillance with a Minor in Health Studies

Rebecca X. Lin
East Asian Languages and Cultures: The Metamorphosis of the Mermaid: On the Transformation of Fairy Tales in Japan with a Minor in Psychology

Yikang Lin
Computer Science: Inductive Biases in Generative Adversarial Networks with a Minor in Statistics

Hunter Logan
English: Trans/Textual Convolutions of the Kaufmanesque: The (Im)Possibility of Cohesion in Charlie Kaufman’s I’m Thinking of Ending Things

Joshua Michael Love
Environmental Studies: Exploring Philly Urban Farms: Methods of Community-Building and Healthy Living with a Minor in Data Science at Bryn Mawr College

Ceannie Lyon
Mathematics: Fair Division With Sperner’s Lemma with a Minor in Statistics

Belle Handler-Maben
Environmental Studies: Mapping the Bi-Co: A Needs-Based Job Board with a Minor in Visual Studies

Anna Malkov
Chemistry: Synthesis and Characterization of Cobalt(II) Chloride Complexes of Guanidine-Based TTP and oBIM3tren with a Minor in Psychology and a Concentration in Biochemistry

Charles Burke Mamlin
Environmental Studies: Imaging Calamites: Methodologies of Investigating Carboniferous-Period Plant Hydraulics with a Minor in Data Science at Bryn Mawr College

Elizabeth Mari

Abigail Tommy Marquis
Chemistry: Small Atomic Changes: Tuning the Reactivity of ABPP Probes with a Concentration in Biochemistry

Lina Marsella

Erin Reingold Martin
Growth and Structure of Cities at Bryn Mawr College: Practices of Social Regulation and Informal Formalization: A Case Study of America’s Homeless Encampments with a Minor in Mathematics

Isabel Martin
Psychology: Compounding Costs: Exploring the Relationship Between Depression and Mind Wandering with Minors in Classical Culture and Society and Educational Studies

Jalen Martin
English: The Leak with a Minor in Visual Studies and a Concentration in Creative Writing
Natalie Catherine Masetti
Psychology: Talking About Race: Discussions of Whiteness in Parent-Child Dyads

Sarah Rose Mastrocola

Daniel H. Mathis
Political Science: From Harmony to Hostility: Understanding the Drivers of the Volatile Relationship Between China and Taiwan

Alexander Crofton May
Neuroscience: The Acer rubrum-Derived Polyphenol Ginnalin A Attenuates Amyloid Beta Toxicity in a Caenorhabditis elegans Model of Alzheimer’s Disease with Minors in Health Studies and Psychology

Keith Mburu
Computer Science: Joint Learning to Improve Generalization: Automatic Music Transcription and Music Source Separation

Justin Heath McAllister
Neuroscience

Cullen David McAnally
Classical Culture and Society and Classical and Near Eastern Archaeology at Bryn Mawr College: Exchange and Agency in Northern Roman Britain: The Native Sites of Fairy Knowe and Leckie Brochs

Christina Maye McBride
Chemistry: The Never-Ending Twists and Turns of a “Biosynthetic Scavenger Hunt”: Unearthing Novel Biosynthetic Gene Clusters Using Bioinformatics and Strategically Evaluating ACP/PPTase Compatibility In Vitro by Traversing the Type II Polyketide Synthase Sequence Space with a Concentration in Biochemistry

Kathryn Fay McCane
English: Narcissus Removed with a Minor in History of Art at Bryn Mawr College and a Concentration in Creative Writing

Nathan Kenneth Haberman McGinty

Blythe Conkling McWhirter
Political Science: “By Any Means Necessary”: Forty Years of Social-Organizational and Moral Resource Mobilization Within Philadelphia’s Squatters’ Rights Campaigns with a Minor in Spanish and a Concentration in Peace, Justice, and Human Rights

Liam Pangle Mears
Classical Culture and Society: Medea in America: Afrocentric Receptions in the 21st Century

Finley Medina
Environmental Studies: A Community Garden Guidebook: Securing Food Pathways for Environmental Justice with a Minor in Fine Arts

Dhruv Mehrotra
Physics: The Measurement Problem in Quantum Mechanics with a Minor in German and German Studies

Anay Ojas Mehta
Mathematics: Modeling Energy Grids Over Variable Time Periods with Concentrations in Mathematical Economics and Scientific Computing

Isha Mehta
East Asian Languages and Cultures: The Relationship Between Humans and Animals: The Qin to the Tang Dynasty

Benjamin Zbar Meyers
Mathematics: A Multiobjective Optimization Model for the Reallocation of Investments in Private-Sector Home Building with a Concentration in Mathematical Economics

Yeda Kristen Min
Biology: Elucidating Post-Transcriptional Control of and by YBX3 in Skeletal Muscles with a Concentration in Biochemistry

Meredith Elaine Modlin
Computer Science: H/FOSS Engagement Through Undergraduate Computer Science Courses and the Impact on Sense of Belonging for Underrepresented Racial Minority Students with a Minor in Fine Arts

Max Mondress
Economics: Undergraduate Stafford Loan Take-Up and Labor Market Outcomes Mathematics at Bryn Mawr College
Samuel Charles Monks
Psychology: A Mixed-Methods Longitudinal Investigation of College Turning-Point Narratives with Minors in Neuroscience and Philosophy

Daniela Moreira
Physics: How Light Affects Matter: An Inquiry of the Unusual Photoconductivity of Silicon Oxide in Relatively Humid Conditions with a Minor in Chemistry

Jamie Moreland
Growth and Structure of Cities at Bryn Mawr College: Olympic Dreams: Francisco Franco’s Cultural Legacy Through the Lens of Spanish Olympic Bids Romance Languages at Bryn Mawr College

Courtlyn H. Morris
Mathematics: Calculating the Denominators of Various Eisenstein Series with Minors in Economics and Educational Studies

Jahsaiah Chozen Noel-Moses
Biology: Understanding Intracellular Localization Patterns of Endosymbiotic Bacteria by Comparing Subcellular Distributions of Wolbachia and Microtubules in Drosophila Embryos with a Minor in Health Studies

Nicholas Bayan Mostaghim
Chemistry: Investigating the Role of Helix III Mutation in Acyl Carrier Protein Conformational Dynamics and Protein Binding in Type II Fatty Acid Biosynthesis with a Minor in Religion and a Concentration in Biochemistry

August Muller
Physics: Catching the Waves: Markov Chain Monte Carlo Methods for Finding Extreme Mass-Ratio Inspirals With the LISA Gravitational Wave Observatory with Minors in Astronomy and German and German Studies, and a Concentration in Scientific Computing

Carlos A. Muniz
Biology: Investigating the Chemically Mediated Protection of Emiliania huxleyi From Viral-Induced Mortality with Minors in Chinese Language and Health Studies

Carolina Alexander Muno
Anthropology: Alongside Other Harmonies: Art as a Means of Growth, Advocacy, and Justice for Philadelphia Youth with a Minor in Health Studies

Lili May Rachel Muntean
Psychology: Social Norms, Self-Monitoring, and Commitment: An Expansion of the Investment Model of Commitment with a Minor in Visual Studies

Ryan William Murphy
Political Science: Capture the Flag: Hierarchy, Bargaining, and the Internationalization of Chinese State-Owned Enterprises with a Minor in Economics

Kennedy Kiplangat Mutai
Economics: Preferences Among NFL Fans: Skin Tone and Merchandise Sales with a Minor in Africana Studies at Bryn Mawr College

Andrew Naiman
Mathematics: Graph Planarity and the 5-Color Theorem

Abhinav Nallapareddy
Economics: Can Sports Help Decrease Civil Conflict? Evidence From International Cricket

Ella Beatrice Namour
History: “Matter Useful, Curious, and Entertaining”: The Almanac as a Tool of Community-Building and Political Engagement with a Minor in Classical Culture and Society

Lucas Leatherman Nelson
Physics: Multi-Scale Structure of SuperEllipse Sector Particles in a Rotating Drum Mathematics at Bryn Mawr College with a Concentration in Scientific Computing

Alexander Jacob Neuschottz

Michiko Ng
English: Necromancing Mary with Minors in Educational Studies and Neuroscience, and a Concentration in Creative Writing

Olufemi Obiwumi
Computer Science: Topic Modeling for Computer Vision
Natalie Rose Olivieri  
Biology: Investigating the Immune Mechanisms Underlying Adverse Outcomes of Congenital Viral Infections  
with Minors in Health Studies and Psychology

Robert Albin Olson  
Economics: Political Equilibrium in a Turnout Model of Political Competition With Advertising  
with a Minor in Philosophy and a Concentration in Mathematical Economics at Bryn Mawr College

William Michael O’Malley  
Economics: "I Went to a Fight and a Hockey Game Broke Out": An Analysis of the Effects of Fighting on Attendance in the NHL in 2022

Saúl Ontiveros  
History: Fashioning Desert Imperialism: Migrant Clothing and Knowledge in 1980s U.S.-Mexican Borderland History  
with a Minor in Health Studies

Alfredo Rafael Ortiz de la Rosa  
Mathematics: Modeling Brain Features Across Adolescence With GAMLSS  
with a Concentration in Latin American, Iberian, and Latinx Studies

Kendall Elizabeth Otridge  
Environmental Studies: A Community Gardens Guidebook for the Ardmore Victory Gardens  
with Minors in Health Studies and Psychology

Kendall Ozorowski  
Biology: Exploring Post-Transcriptional Control of Amino Acid Transporters and Autophagy  
with a Minor in Health Studies

Marcos Antonio Padron-Curet  
Spanish: Cosmopolitas contra el Imperio: Algunos trazos de Praga en la geografia cultural del Boom latinoamericano  
French and Francophone Studies at Bryn Mawr College: Entre métèques et cosmopolites: La place de Paris dans l’imaginaire des écrivains du Boom latino-américain  
Romance Languages at Bryn Mawr College

Mitchell Wu Pagano  
Neuroscience: Neural Correlates of Dysphoria and Mind Wandering

Celia Avery Page  
Economics: An Examination of Discrimination in the Premier League

Celine Pak  
Classical Languages: A Feminist Exploration of the Mother-Daughter Relationship in Euripides’ Elektra  
Comparative Literature

Michelle Mae Soberano Panaguiton  
Biology: Comparing Pollen Nutritional Quality Between Diploid and Polyploid Monkeyflower Species  
Fine Arts: An exhibition entitled A Reinterpretation of Philippine Creatures

Ava Panetto  
Neuroscience: Developing a 3D Rodent Object Categorization Paradigm to Investigate Cholinergic Involvement  
Transnational Italian Studies at Bryn Mawr College

Carley Elizabeth Parsons  
Chemistry: Synthesis Towards a Non-Peptide Peptidomimetic of the Endogenous Opioids: A Painkiller Without the Constipation  
with a Minor in Classical Studies

Darshan Patel  
Astronomy and Physics: Constraining Properties of Subluminal Lasers for Use in Dark Matter Detection

Lisette Tuyet Nhung Ngoc Pham  
Biology: Investigating the Link Between Alzheimer’s Disease and Sleep Deprivation  
with a Minor in Linguistics

Susanna Louise Pieper  
Psychology: Internal Tempo in the Workplace: The New Frontier for Professional Efficiency  
with a Minor in Data Science at Bryn Mawr College

Olivia Jane Pindzola  
Biology: Investigating Tau Pathology Across Alzheimer’s Disease Duration in a Mouse Model  
with a Minor in Linguistics

Ankith Suhas Pinnamaneni  
Computer Science: Rethinking K–12 Computer Science Education  
with a Minor in Economics

Juan Miguel Pinto Diaz  
Growth and Structure of Cities at Bryn Mawr College: United in Violence: Conflict, Confusion, and Storytelling in the American Road Trip  
with a Minor in Philosophy at Bryn Mawr College

Eden Pleasure-Kranowitz  
Classical Culture and Society: The Woman They Made Myth About: Medea and the Power of Retelling in Euripides and James Ijames
Alana Teresa Ponte
Chemistry: Progress Towards Incorporating an L-Homopropargylglycine Alkyne Probe in N-Terminally Acetylated Alpha-Synuclein via Auxotrophic Expression
with a Minor in Health Studies and a Concentration in Biochemistry

Asher Porphy
Economics: The Impact of Mobile Money Proliferation on Women’s Savings Propensities in Uganda

Logan Alexander Post
Mathematics: On Zero-One Laws in Random Graphs
with a Minor in Physics

Joslynn Provow
Mathematics: Ramsey Games and Their Strategies

Ryan Quenemoen
History of Art at Bryn Mawr College: The Augmented Self at the Disintegrating Boundaries Between Virtual and Physical Worlds in Peter Burr’s Arcology
with a Minor in Chinese Language

Nicolas S. Ramos-Zapata
Spanish

Danika Nicole Rasmussen
Astrophysics: A NICER Analysis of Three Pulsars
Fine Arts

Isabel Kusum Ray
Neuroscience: ALS-Associated Aggregation and Sleep: C9orf72 Poly-PR Aggregates Disrupt Circadian Rhythm Gene Expression in Drosophila melanogaster
with a Minor in History of Art at Bryn Mawr College

Alexander William Rebhun
Growth and Structure of Cities at Bryn Mawr College: Reinventing the Wheel: Information Exchange in Small-Town Bicycle Infrastructure

Alex Reichard
Computer Science: Visualized Functional Programming Through Substitutional Concepts

Meinhardt Urs Merlin Rentrup
Political Science: The Politics of Sport: When Soccer Ultras Take Action
with a Minor in Economics

Maria Reyes Torres
Environmental Studies
with a Minor in Growth and Structure of Cities at Bryn Mawr College

Colin Vincent Riley
Political Science: The Environmental Protection Agency in Court: Evaluating Judicial Change in EPA Lawsuits
with a Minor in Educational Studies

Rubí Samanta Rivas Guamán
Biology: Passive Intrusion of Granular Media Using Bio-Inspired Zebra-Tailed Lizard (Callisaurus draconoides) Foot Model Shows Foot Flexibility Affects Intrusion Dynamics
Spanish: ¿Se puede hablar de lo cuir en comunidades kichwa? Un análisis de cuatro obras de arte kichwa con un enfoque en el género y la sexualidad

Kayla Michelle Robinson
Economics
with a Minor in Biology at Bryn Mawr College

Nathan Wesley Rose
Biology: Exploring the Mechanism of YBX3-Mediated Translational Repression of a Target Transcript

Madeleine Rosen
Political Science: Out of the Shadows and Into the Light: How U.S. Lower Courts Treat Deviations From Supreme Court Procedural Regularity
with a Minor in Sociology

Jade Rousseau
Computer Science: Fairness in Information Access: Emphasizing the Network
Philosophy: Leaps in Perception: Towards a Philosophy of Imaginatively Endowed Perceiving

Naren Sebastian Roy
Anthropology: Existing Between Two Worlds: How Haverford College Students and the Center for Peace and Global Citizenship Navigate Social Justice Work
with a Minor in Visual Studies and a Concentration in Latin American, Iberian, and Latinx Studies

Dorothea Grace Rugg
Mathematics: On the Nonorientable 4-Genus of Pretzel Knots

Ivan Atilano Ruiz
Biology: Using RNAScope as a Novel Technique to Compare In-Situ Spatiotemporal Patterns of RNA Expression During Gastrulation in Drosophila melanogaster and Anopheles gambiae Embryos
Jack McDonough Ryan  
Economics: Household Donations During Economic Uncertainty: Examining the Relationship Between the 2008 Recession and Household Donations by Sector with a Concentration in Peace, Justice, and Human Rights

Alyssa Saito  
Psychology: Marketing Homes in Real Estate: Influencing Consumer Behavior Through Social-Cognitive and Perceptual Psychology with a Minor in Health Studies

Hipolito “Hip” Casarez Salazar  
History: Noxious Remains and the Farmworker Body: How the United Farm Workers’ Rhetoric Using Body Politics Gave Rise to a Ban on Pesticides

Grace Elizabeth Salgado  
Environmental Studies: Climate Resilience in New York City: Addressing Environmental Injustices in NYC’s Low-Income Housing Through Climate Policy with a Minor in Economics

Giovanni W. Santalucia  
Political Science: Understanding the Resilience of Electoral Populism: Populist Recurrence in Brazil

Spencer Alexander Sapir  
Economics: The Effect of Market Volatility on Equity Offerings Across Different Industries

Nicholas F. Scardigno  
Economics: The Optimal Contract: A Dive Into Potential Inefficiencies in the MLB Free-Agent Market with a Minor in Environmental Studies

Ashley Schefler  
Physics: Oxygen Minimum Zones in the California and Humboldt Upwelling Systems Linked to Changes in Atmospheric Circulation with a Minor in Environmental Studies and a Concentration in Biophysics

Rachel Rock Schiffer  
Political Science: The Abrams Playbook: Georgia as a Model for a New Strategy in Democratic Politics with a Minor in Environmental Studies and Concentrations in Gender and Sexuality Studies and Peace, Justice, and Human Rights

Avi Serebrenik  
English: A Call to Dance: The Transformative Power of Dreams and Grief in Paula Vogel’s The Baltimore Waltz with a Minor in Computer Science at Bryn Mawr College

Layan Imad Ali Shaban  
Chemistry: Synthesis of an Activity-Based Protein Profiling Probe Through the Application of (R)-Dysidazirine’s 2H-Azirine Ring  
Peace and Conflict Studies at Swarthmore College: Representation of Muslims: Western Media Versus Lived Experience

Jordan Marlon CeJae Shand  
Computer Science: A Game Theoretical Investigation Into Convergence Instability of Generative Adversarial Nets with a minor in Mathematics at Bryn Mawr College

Anubhav Sharma  
Computer Science and Mathematics: Finite Field Arithmetic and Its Applications to Cryptography

Selena She  
Mathematics at Bryn Mawr College: Language Models Show Within- and Cross-Language Similarities in Concrete Noun Meaning, But Not Differences Between L1 and L2 English Speakers  
Cognitive Science at Swarthmore College

Edward Shin  
Psychology: Bottom-Up Ethnic-Racial Socialization in Asian American Families: Strategies, Outcomes, and Relations to Culture Brokering with a Minor in Computer Science at Bryn Mawr College

Rasaaq Shittu  
Economics: Rendering Reimbursement: A Theoretical Approach to Centralized Telehealth Policy with a Minor in Philosophy at Bryn Mawr College

Samantha Amanda Silverman  
Computer Science: Analyzing Passing Patterns and Player Space Occupation to Determine if They Are Key to a Soccer Team’s Victory  
Mathematics: Modeling Debris Flow After Fires Through Ordinary and Partial Differential Equations

Cyrus Xavier Slavin Bangasser  
Neuroscience: What Is the Neurological Basis for Risk-Averse Behavior and How Does It Affect Risk-Versus-Reward Decision-Making? with a Minor in Film Studies at Bryn Mawr College

Jared Zachary Sloan  
Anthropology: Yesh Breira/There Is an Alternative: Towards the Development of Anti-Zionist Jewish Community with a Minor in Mathematics
Julia Ann Smeltzer  
Biology and Environmental Studies: Impact of Global Change Factors on Phenotypic Traits of Phragmites australis and the Eco-Evolutionary Implications

Ashton Guillory Smith  
Economics: An Analysis of Business Combinations Within the Automobile Manufacturing Industry: The Effects of Mergers, Acquisitions, and Alliances on Firm Performance and Value
with a Minor in Mathematics at Bryn Mawr College

Caroline Slusar Smith  
Chemistry: The Design and Synthesis of a 2H-Azirine Chemical Probe Based on a Dysidazirine Scaffold with a Concentration in Biochemistry

Logan Earl Smith  
Chemistry: Explicit Polarization Improves Solvation Structure, Dynamics, and Spectroscopy in Molecular Dynamics Simulations of Carbon Dioxide in Ionic Liquids with a Concentration in Biochemistry

Maisie Whitman Smith  
Biology: IphaFold Predictions Fail to Identify Transmembrane Targets for Streptococcus pneumoniae Paired Type IIb Bacteriocins with a Concentration in Biochemistry

Sarina Marie Smith  
Biology: Investigating Caenorhabditis elegans as a Model for TBCK Syndrome, a Pediatric Neurogenetic Disorder with a Minor in Health Studies

Theodore Smith  
Psychology at Bryn Mawr College: Malleability Matters: The Effects of a Holistic Self-Control Intervention and the Moderating Role of Implicit Theories with a Minor in Educational Studies

Delaney Shea Snowden  
Biology: Using Drosophila melanogaster as a Model for NMDA Receptor Dysfunction in Alzheimer’s Disease with a Minor in Neuroscience

Dylan Soemitro  
Computer Science: A Spectral Clustering Approach to Cluster Mixed-Type Datasets

Aviva Camras Rowe Soll  
Biology: Application of Environmental DNA and Geochemistry for Assessment of Acid Mine Drainage Remediation Efficacy in New Philadelphia, Pennsylvania with a Minor in Geology at Bryn Mawr College

Paul Walker Soulanille  
Computer Science: On the Construction of Polar Codes with a Minor in Mathematics

Trea Venus St.Hillaire  
Biology: Testing Environmental Conditions That Affect Crithidia fasciculata Adhesion in an In Vitro Model of the Gut of Mosquitoes with a Minor in Classical Culture and Society

Andrew William Stephens  
Political Science: The Republican Party Has Been Hijacked by the Alt-Right

Jacquelyn Stifelman  
Neuroscience: Early Psychosocial Deprivation, Cortical Development, and Cognitive Flexibility in Adolescence: Evidence From the BEIP Randomized Control Trial with a Minor in Chemistry

Claire F. Stohlman  
German and German Studies: Eine Untersuchung von der Repräsentation ostdeutscher nationaler Identität in den ostdeutschen „Indianerfilmen” with a Minor in Film Studies at Bryn Mawr College

Alexandra Michelle Streicher  
Biology: To Bee or Not to Bee: Unexpected Bumblebee Preference Changes in Indoor Pollination Experiments With a Mimulus Hybrid

Pranith Reddy Sudini  
Political Science: Selective Humanitarianism: A Comparative Study of U.S. Intervention in Somalia and Rwanda with Minors in Economics and Philosophy

Yuxuan Sun  

Macintyre Sunde  
Computer Science
Brandon Sung
Biology: Supporting an S-Phase Mechanism for Oligonucleotide Directed Mutagenesis (ODM): Using Supraoptimal Temperature and Light/Dark Cycles to Increase ODM Efficiency in Chlamydomonas reinhardtii

Janani Suresh
Anthropology: The Pedagogy of Political Science Education: How Modern Scholarship Affects BIPOC, Women, Queer, Low-Income, and Disabled Students at Haverford College with a Minor in Education at Bryn Mawr College and a Concentration in Peace, Justice, and Human Rights

Lillian Sweeney
History: “A Little Irish Cailin in an Ould Plaid Shauld”: The “Colleen” Archetype and the Construction of Irisnness

Joseph Tadrous
Computer Science: Image Segmentation Using Deep Learning

Shi Jie Samuel Tan
Computer Science and Physics: Resilience of Surface Codes and Quantum Error Correction Mathematics at Bryn Mawr College

Nicholas Antonio Taylor
Philosophy: Traumatic Temporalities: Intersubjective Meaning and Interpreting the Other with a Minor in Psychology

Bianca Carmelita Teves
Mathematics: Fully Commutative Kazhdan-Lusztig Cells via Temperley-Lieb Diagrams with a Minor in Literatures in English at Bryn Mawr College

Catherine Grace Tomson
History: Motherwork in a Community of Care: The Midwife as a Public Figure in Early America with Minors in Health Studies and Dance at Bryn Mawr College

Grayson Toole
English: Embracing Queer Failure and Reaching for Queer Utopia Within Chen Chen’s Poetry with a Minor in Anthropology

Nathan Patrick Torres
Chemistry: The Economic and Environmental Consequences of Metals in Plastics with a Minor in Economics at Bryn Mawr College

Kristina Tran
Chemistry: Synthesis and Characterization of a Bidentate Ligand With Two Guanidines, oBIM2DAP with a Concentration in Biochemistry

Mimi Tran
Growth and Structure of Cities at Bryn Mawr College: Unsettling Home: The Vietnamese Refugee Settler Condition in the U.S. Gulf South with a Minor in Environmental Studies

Nico Tripeny
Mathematics: Predicting NCAA Division III Men’s Cross Country Championship Results Using Random Effects with Minors in Classical Culture and Society and Statistics

Ryan Claude Trotter
Computer Science: Evaluating the Effect of Training Data on Bias in Generative Adversarial Networks

Ivan Tseytlin
Computer Science: Effective Resistance Metric for Networks: Graph Formalism, Algorithms, and Applications for Granular Materials Physics: Contextual Extension for Optimal Energy Control Models of Cerebral Cortex Networks with a Minor in German and German Studies

Katelyn Tu
Neuroscience

Nancy Tucker
Economics: The Effects of New Jersey’s FLI and TDI Benefits on the Earnings and Labor-Force Participation of Parents

Mackenzie Tygh
Physics: Sacred-Secular Dialectics in Spacetime: Medieval and Modern Notions of Causality in Dante’s Paradiso with a Minor in Astronomy

Isha Upender
Biology: Investigating the Mechanism of Action of a Novel Marine Antimicrobial Drug with a Minor in Neuroscience

Kaila Uyeda
Mathematics: Analysis and Modification of a Sinking Model for Biofouled Particles in the Ocean with a Minor in Health Studies
Tej Vaddi
Economics: *Impact of the Inflation Reduction Act on Novel Oncology Drug Development*
with a Minor in Mathematics at Bryn Mawr College

Benjamin Craig Valenti
Computer Science at Bryn Mawr College: *GraEDU: An Alternative Grading System*
with a Minor in Mathematics at Bryn Mawr College

Elijah M. Vega
English: *More Than Music: Kendrick Lamar’s To Pimp a Butterfly*

James O’Malley Vickery
Physics: *Kelvin Probe Force Microscopy and Photoelectric Porphyrin Nanorods*
Mathematics at Bryn Mawr College

Lucas Doug Jone Voit
History: *A Fleeting Heimat, Yet an Enduring Impact: A Spatial and Legal Analysis of the Lasting Effects of Germany’s Kiautschou Bay Leased Territory* with a Minor in Environmental Studies

Martin Vollmayr-Lee
Mathematics: *An Analysis of Lehmer’s Conjecture Through the Hecke Algebra*

Tien Hoa Vu
Neuroscience: *Exploring the Effects of Camellia japonica Extract on Protein Aggregation in a Caenorhabditis elegans Model of Alzheimer’s Disease* with a Minor in Health Studies

Khalil Ayele Walker
Philosophy: *Coping With Mortality: An Argument for a Stoic Lifestyle*

Sophia Wan
Anthropology: *Standing Our Ground: Choreographing Legacies of Land and Cultural-Political Activism in Philadelphia’s Chinatown* with a Minor in Visual Studies

Claude-Annaeus Jiawen Wang
Chemistry: *Characterizing the RET/GDNF Pathway in Kidney Organogenesis With Single-Cell Western Blotting* with a Minor in Japanese Language

Wenyun Wang
East Asian Languages and Cultures: *The Rise of Peasant Nationalism in Chinese Rural Areas During World War II* with a Minor in Fine Arts

Xiaorong Wang
Computer Science: *Pre-Training and Fine-Tuning BERT: Energy and Carbon Considerations*
Mathematics: *Topological Data Analysis and Its Applications*

Yimeng Wang
Linguistics: *Intonation Pattern of Declarative Questions in Mandarin Conversational Speech*
Mathematics at Bryn Mawr College

Yufan Wang
Philosophy: *True Solidarity and bell hooks’ Engaged Pedagogy*
with a Minor in Psychology

Benjamin Ward
Economics: *Soccer Transfers and Performance in the Premier League: How Popularity Affects Transfer Fees*

Isaac Riley Wasserman
Computer Science: *Graphically Guided Neural EM Segmentation*

Gabrielle Karin Watkins
Environmental Studies: *Designing and Teaching Environmental Education Lessons for Preschool: Animals, Birds, Plants, and Nature Appreciation*

Madeline Elizabeth Webster
Computer Science: *Examining Usability Testing of Internet of Things (IoT) and Augmented Reality (AR) Assistive Technologies for Users With Motor Disabilities* with a Minor in Anthropology and a Concentration in Peace, Justice, and Human Rights

Alden Blatt Weinberg
Physics: *Aggregate Formation Within an Acoustic Field* with a Minor in Visual Studies

Jack Ross Weinstein
Political Science: *The Great White Roots: Haudenosaunee Influence in Western Political Theory* with Minors in Environmental Studies and Growth and Structure of Cities at Bryn Mawr College

Harrison Kobe Weinstock
Computer Science: *Exploring Functional Graph Representations for Max Flow*
Mathematics: *Algorithmic Transit Optimization: Evolutionary Algorithms Applied*

Thomas R. Whelan
Economics: *The Effects of Global Uncertainty Factors, Local Financial Variables, and Global Financial Market Variables on the CDS of PIIGS Countries*
Eva M. White
Physics: Designing a Microgrid for Haverford
with Minors in Global Asia and Environmental
Studies

Natalie White
Film and Media Studies at Swarthmore College:
Amplifying the BIPOC+ Voice and Self Through
Podcasting: An Analysis of Black and Indigenous
Communities Using Podcasting as a Form of
Representation, Resistance, and Self-Healing

Eric Whyman
Mathematics: Persistent Homology
Physics: Multiparameter Persistent Homology and
Granular Materials
with a Minor in Linguistics

August Bang Williams
Political Science: The Modern Smoked-Filled Room:
The Primary Endorsement Process at the Local Level

Davion Marquise Williams
Chemistry: Exploratory Work With Templated
Vanadium Selenites as Host System for New Hybrid
Materials

Sharon Gwendolyn Williams
Psychology at Bryn Mawr College: An Analysis of
Criminal Psychopathology: Who’s Targeted and Why

Liana Wilson-Graff
Independent Major in Dance: An original
dance entitled Body A/part and an essay entitled
Spontaneity as a Site for Change: Reflections on the
Dancing Body in Afro-Cuban Rumba and
Body A/part
with a Minor in Literatures in English and a
Concentration in Africana Studies, both at
Bryn Mawr College

Annemarie Wood
Biology: The Influence of Biofouling on the
Degradation of Marine Plastic Debris
with a Minor in Environmental Studies

Aaron Jonathan Xu
Physics: Agent-Based Modeling for a Simple Habitat
Fragmentation Scenario
with a Minor in Environmental Studies and a
Concentration in Biophysics

Clarice Xu
Biology: Correction of Polyalanine Mutations in the
ARX Gene Using CRISP/Cas9 in Primary Cells of
ArxGCG7/Y Mice
with a Minor in Psychology

Lyvia April Yan
Philosophy: The Blameworthiness of Psychopaths
Based on Moral Responsibility
with a Minor in Visual Studies

Reese Yau
English: Tender Flesh: Theorizing the Hybrid
Embodied Poetics of the Asian American Queer Femme
in Franny Choi’s Soft Science
with Minors in Anthropology and Asian American
Studies

Olivia Lilikalani Yoshida
Biology: Automated Image-Analysis Software
Elucidates Cell Targets of a Novel Antibiotic

Caroline Gabriela Young
Anthropology: Reworking the Canon: Exploring
Young Women’s Negotiations of Power in Fan Fiction
with a Minor in Educational Studies

Emilia Maria Zegers Matthews
Music: A violin recital featuring works by
Beethoven, Persichetti, and Mozart
with a Minor in Psychology

April Zeng
Psychology: A Mixed-Methods Longitudinal
Investigation of College Turning-Point Narratives
with a Minor in Health Studies

Carrie Zhang
Linguistics: Viable Verbs and Adjectives for Mandarin
Reduplication
with a Minor in Transnational Italian Studies at
Bryn Mawr College

Angela Zhang Qianhui
Sociology: Manufacturing Art Museums:
Labor Organization and the Division of the Labor
of Domination in American Art Museums
with a Minor in Political Science at Bryn Mawr
College

Margin Tianya Zheng
Mathematics: Finite Geometry and Applications to
Coding Theory
Music: A recital on piano and harpsichord, with an
original composition entitled Sound and Story
Cathy Zhu
Anthropology: *Hot Woks and Golden Palaces: Navigating Ethnic Identity, Family, and Coming-of-Age in the Chinese Takeout Restaurant*

Psychology: “Mom, Dad—We Need to Talk”: *Exploring How Asian American Youth Talk to Their Immigrant Parents About Race with a Minor in Asian American Studies*

Andrew Lee Zolensky
Philosophy: *Expected Utility and Moral Attitudes*
Mathematics at Bryn Mawr College

Yiting Zou
Computer Science: *Topic Modeling in Image Segmentation*
Mathematics at Bryn Mawr College

Completion of graduation requirements may not be confirmed by this program, as the college transcript serves as the sole official student record. Furthermore, this program only includes those thesis titles submitted by students before the print deadline.
WELCOME FROM THE ALUMNI ASSOCIATION

On behalf of the almost 15,000 alumni who incorporate Haverford values into our professional, personal, and public lives, we are thrilled to welcome the members of the Class of 2023 to the alumni community! Congratulations to each of you on forging the auspicious path that has led you to this day. The Alumni Association Executive Committee (AAEC) plays a key role in building and maintaining lifelong relationships between alumni and the College, bridging generations of graduates, and providing career and coaching assistance to current students. We look forward to meeting you at upcoming alumni events and counting you all as our newest members.

—Beverly Ortega Babers, Esq. ’84, President, on behalf of the AAEC

Thank you to our Senior Commencement Committee Representatives

Yousef E. Almbaid
Erin Reingold Martin
Aviva Camras Rowe Soll
On ceremonial occasions, scholars wear academic gowns indicating the level of their degree and hoods indicating the field of the degree and the institution granting it. The origins of academic regalia date back to the 12th century, when gowns and hoods provided a layer of warmth in cold stone buildings. While observers may not be able to easily decipher each aspect of the regalia, they can readily appreciate the gowns, caps, and hoods as an expression of homage to more than 800 years of academic tradition.

**Gowns**

- At U.S. colleges and universities, the bachelor's gown is simply cut, with open, pointed sleeves.
- The master's gown is fuller, with oblong, square-cut sleeves and two horizontal bars on the sleeve.
- The doctor's gown is long, full-cut, with bell-shaped sleeves. It has velvet panels down the front and three horizontal bars on the sleeve, which are typically black, but occasionally feature the color indicating the field of learning. Some panels feature the seal of the institution. British doctoral regalia often feature an open front and no bars on the sleeves.
- The college or university president’s gown is distinguished by four horizontal bars on the sleeve.
- Doctoral gowns are often black, but sometimes are a distinctive color representing the degree-granting institution, for example: Harvard's crimson; North Carolina's, Michigan's, Berkeley's, and Columbia's various shades of blue; Princeton's black and orange; Oxford's and Pennsylvania's red and blue; or Chicago's maroon.

**Caps**

All academic degree holders wear the mortarboard cap or the softer tam, which often feature tassels, though some universities abroad distinguish their degree holders with more unusual headgear.

**Hoods**

- The inner lining of the hood carries the color or colors of the institution that granted the degree, with multiple colors divided in chevrons.
- The color of the velvet border indicates the field of learning in which the degree was earned. Dark blue indicates philosophy; white, arts, letters, and humanities; golden yellow, science; scarlet, theology; purple, law; brown, fine arts and architecture; pink, music; green, medicine; copper, economics; lemon, library science; salmon, public health; light blue, education; and drab, business. Those who have attained a Doctor of Philosophy (Ph.D.) wear the dark blue of philosophy, even when their specific focus is not philosophy. For those individuals, the edging color of their hoods or the color of their gown panels may reflect the field of learning.

**Haverford Examples**

- President Wendy Raymond’s robes are Haverford’s red and black, with four bars, befitting her role as president. As her Doctor of Philosophy (Ph.D.) is from Harvard, her hood is bordered in dark blue and features Harvard’s crimson in the hood liner.
- As Provost Linda Strong-Leek’s Doctor of Philosophy (Ph.D.) is from Michigan State University, her robes are Spartan Green. Her gown’s three bars indicate her doctoral degree; her hood’s blue border represents her Ph.D., and its white satin edging signifies her field, English.
“I suggest that you preach truth and do righteousness as you have been taught, whereinsoever that teaching may commend itself to your consciences and your judgements. For your consciences and your judgements we have not sought to bind; and see you to it that no other institution, no political party, no social circle, no religious organization, no pet ambitions put such chains on you as would tempt you to sacrifice one iota of the moral freedom of your consciences or the intellectual freedom of your judgements.”

— President Isaac Sharpless

Haverford College Commencement, 1888

Photo by Logan de Raspide Ross ’23