PSYCHOLOGY PROGRAM HANDBOOK 2023-2024

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Welcome

Dear Psychology Students:

Welcome to the Bard College Psychology Program!

This Psychology Handbook was created to serve as a general guide to use as you embark on your studies with us. Please read this Handbook carefully; this represents the most up-to-date guidelines and procedures for the Program. As you'll see, information is included about events, moderation, senior project, and psychology faculty. We hope you find this information useful.

The most recent version of this handbook, and more details about the Psychology Program, can always be found on the program website (https://psychology.bard.edu). Past handbooks are also available in PDF format on the website.¹

If you have any questions, please do not hesitate to contact any of the faculty in the Psychology Program.

We look forward to working with all of you, and we wish you the best for a productive and successful year.

Sincerely, Justin Hulbert, PhD Associate Professor of Psychology Psychology Program Director

 $^{^{1}\}mathrm{Past}$ handbooks: 2022–2023; 2021–2022; 2020–2021; 2019–2020; 2018–2019; 2017–2018; 2016–2017.

2023–2024 Psychology Program Calendar

Fall 2023

Event	Date
First Day of Classes	Monday, September 4
Welcome Back Social Event	Thursday, September 7 @ 4pm
Short Moderation Papers Due	Wednesday, September 13
Senior Project Presentations (Senior IIs)	Thursday, September 14 @ 4pm
Senior Project Statements Due (Senior Is)	Monday, September 25
Fall Break	Monday, October 9 & Tuesday, October 10
Psychology Moderation Papers Assigned	Monday, November 13
Senior Project Midway Papers Due (Senior Is)	Friday, November 17
Psychology Moderation Papers Due	Monday, November 27
Thanksgiving Recess	Thursday, November 23 - Sunday, November 26
Board Days (Senior Is and Moderation)	Thursday, November 30 & Friday, December 1
Advising Day	Wednesday, December 6
Senior Project Posters due to advisor	Monday, December 4
Senior Project Final Papers Due (Senior IIs)	Monday, December 11
Completion Days	Monday, December 18 - Friday, December 22
Last Day of Classes	Friday, December 22

Spring 2024

Event	Date
First Day of Classes	Monday, January 29
Short Moderation Papers Due	Wednesday, February 7
Senior Project Presentations (Senior IIs)	Thursday, February 8 @ 4pm
Senior Project Statements Due (Senior Is)	Monday, February 26
Spring Break	Saturday, March 16 - Sunday, March 24
Psychology Moderation Papers Assigned	Monday, April 8
Senior Project Midway Papers Due (Sen. Is)	Friday, April 19
Psychology Moderation Papers due for Moderators	Monday, April 22
Senior Project Posters due to advisor	Wednesday, April 24
Advising Days	Monday, April 29 & Tuesday, April 30
Senior Project Final Papers Due (Senior IIs)	Wednesday, May 1
Rising Senior Meeting	Thursday, May 9
Board Week	Wednesday, May 8 - Tuesday, May 14
Completion Days	Wednesday, May 15 - Tuesday, May 21
End of Year Social Event	TBD
Senior Project Poster Session	TBD
Last Day of Classes	Tuesday, May 21
Senior Brunch	Wednesday, May 22
Commencement	Saturday, May 25

Overview of the Psychology Program

The mission of Bard's Psychology Program is to serve a foundational role in engaging the College and broader community with the science of human behavior. We serve as a hub for the mind and behavioral sciences through our curricular and co-curricular offerings that augment the course of study for all students, especially those in the Divisions of Science, Mathematics, and Computing and Social Studies, as well as through our leadership in the Mind, Brain, and Behavior Concentration Our excitement and our challenge stem from the field's enormous breadth, as we cover topics ranging from genes to social systems.

In all courses, we strive to:

- 1. introduce students to foundational content in psychology's subfields (social, cognitive, developmental, and abnormal psychology, as well as neuroscience);
- 2. take a multi-level approach to answering psychological questions;
- 3. engage students in integrative, critical thinking about the mechanisms underlying human thought and behavior;
- 4. educate students in the process of science as it applies to human behavior;
- 5. provide inclusive education for students of all backgrounds;
- 6. provide hands-on learning opportunities for students to engage in the above; and
- 7. prepare students to excel in their chosen field.

The Program cultivates an environment where teaching and research mutually inform one another by supporting faculty research, providing opportunities for students to become engaged in research during the academic year and summer and through the Senior Project (completed by all Bard students), encouraging students to gain internships and externships, and hosting speakers from other institutions.

Diversity, Equity, and Inclusion

The Psychology Program believes that Psychology is a major in which any Bard student can succeed, and we strive to make the Program one in which students in all courses feel like they belong. The Program believes that diversity is a vital foundation for innovation, leadership, and cultural awareness, and we strive to create an inclusive and accessible environment through continual efforts in pedagogy, curriculum, and advising. We aim to foster a welcoming environment that represents opportunities for all students through inclusive representation and promotion of voices historically marginalized because of such factors as race, ethnicity, sex, gender, sexual orientation, socioeconomic status, religion, nationality, immigration status, age, political affiliation, and physical ability.

We recognize that Bard College exists within systemic patterns of cultural and economic oppression that have denied certain groups equal access to education and power. To be a genuinely equitable community, we must welcome and enact change and transformation, and we commit to the continual creation and strengthening of opportunities for equal access both in and outside of the classroom. This commitment necessitates that we create a community that encourages the expression of diverse perspectives, supports learning and work that is free from discrimination and harassment, promotes inclusion and respect, and regularly evaluates progress toward meeting diversity goals.

Supporting a diverse and inclusive environment is everyone's responsibility. The Program takes seriously our own role in actively contributing to social equality, empowering individuals to share their unique experiences, challenging stereotypes, promoting critical thinking skills, and becoming engaged citizens.

• We will continue teaching courses highlighting systemic inequalities, integrating this content into our other courses, and introducing new courses that respond to the impact of racism, stigma, and inequality.

- We will incorporate inclusive teaching practices in our courses, and encourage students in all classes to treat one another with dignity and respect.
- \bullet We commit to auditing our syllabi to increase readings from researchers of all backgrounds.
- We work to create inclusive environments in our courses.

Areas of Study in the Psychology Program

The Psychology Program provides focused opportunities of learning in the areas of ab-normal psychology, cognitive psychology, developmental psychology, neuroscience, and social psychology. It provides a thorough foundation in empirical methodology and analysis, and offers opportunities to participate in meaningful research and laboratory experiences.

In brief, **Cognitive Psychology** is the empirical study of how concepts, knowledge, and language are acquired and represented, as well as how knowledge is engaged in human memory, action, perception, and reasoning. **Developmental Psychology** involves the study of change (both growth and decline) over the life span, including changes in cognition, social interaction, and brain development. **Abnormal Psychology** is a research-oriented science that pertains to the study of psychopathology (i.e., psychological disorders), personality, and treatment.

Neuroscience focuses on understanding the structure and function of the central and peripheral nervous systems as it investigates questions of brain and behavioral development, normal brain function, and disease processes. Finally, Social Psychology is the scientific study of people in their social contexts, emphasizing the study of behavior and social thought, preferences, and feelings about oneself, one's social groups, and others.

Faculty Descriptions and Publications

Justin Dainer-Best

Assistant Professor in Psychology | (he/him)

Education and Training

Degree	Institution
B.A.	Haverford College
Ph.D.	The University of Texas at Austin

Professor Dainer-Best is a clinical psychologist interested in how positive and negative emotions change the way people think about themselves and the world around them. More broadly, he is interested in the genesis and maintenance of depressed mood. His work focuses on identifying the best methods for understanding how people who are depressed and anxious think. Professor Dainer-Best's research continues to ask questions about how people who are depressed describe themselves—and how to increase positive self-description. For instance, past work showed that adults with low mood will learn to describe themselves more positively after imagining future positive social situations. The Affective Science Lab uses clinical research methods to identify the factors underlying mood disorders. Work in the lab uses samples of adults, online and in person, across the range of depressive symptoms.

Laboratory website: https://affectlab.bard.edu/

- Rubin, M., Telch, M. J. & Dainer-Best, J. (2021). In game as in life? Linking decision-making to real-world behavior. *Collabra: Psychology*, 7(1), 28115. https://doi.org/10.1525/collabra.28115
- Dainer-Best, J., Shumake, J.D., & Beevers, C.G. (2018). Positive imagery training increases positive self-referent cognition in depression. *Behaviour Research and Therapy*, 111, 72–83. https://doi.org/10.1016/j.brat.2018. 09.010
- Beevers, C.G., Mullarkey, M.C., Dainer-Best, J., Steward, R.A., Labrada, J., Allen, J.J.B., McGeary, J.E., & Shumake, J.D. (2019). Association between negative cognitive bias and depression: A symptom-level approach. *Journal of Abnormal Psychology*, 128(3), 212–227. https://doi.org/10.1037/abn0000405

Sarah Dunphy-Lelii

Associate Professor in Psychology | (she/her)

Education and Training

Degree	Institution
B.A.	Pennsylvania State University
M.A.	University of Michigan
Ph.D.	University of Michigan

Professor Dunphy-Lelii's undergraduate education focused on child cognitive development, after which she became project coordinator for the Cognitive Evolution Group at the University of Louisiana, Lafayette, studying cognition in chimpanzees. Professor Dunphy-Lelii then pursued graduate work with human preschoolers on very similar theoretical topics—for example, the ways that young individuals think about the minds of others, and how they reason about unseeable behaviors such as thoughts, beliefs, and desires. She became intrigued by how the specific case of autism might shed some light on these same topics—in particular, how different children learn to distinguish self from other in terms of perspective-taking, memory, and imitation. Professor Dunphy-Lelii spent recent sabbaticals in Kibale National Park, Uganda following wild chimpanzees; at Bard, her interests in young children's social cognition, children with autism, and non-human primates influence her ongoing research and teaching.

Laboratory website: http://cdp.bard.edu

- Dunphy-Lelii, S. & Mitani, J. (2019). Wild chimpanzees show a decrease in pant grunting over their first 6 years of life. *Folia Primatologica*, 90, 77–88.
- Dunphy-Lelii, S., Hooley, M., McGivern, L., Skouteris, H., & Cox, R. (2014). Can I reach that sticker? Preschoolers' practical judgments about their own and others' body size. *Journal of Cognition and Development*, 15, 584–598.
- Dunphy-Lelii, S., LaBounty, J., Lane, J., & Wellman, H. (2014). The social context of infant intention understanding. *Journal of Cognition and Development*, 15(1), 60–77.

Justin C. Hulbert

Associate Professor in Psychology || (he/him/his) Psychology Program Director

Education and Training

Degree	Institution
B.A.	University of Pennsylvania
M.A.	University of Oregon
Ph.D.	University of Cambridge
Post-Doctoral Fellow	Princeton University

For nearly two decades, Justin has been investigating core memory processesfrom encoding to forgetting—using the tools of cognitive neuroscience. Justin received his B.A. in psychology from the University of Pennsylvania, where he was supported by a full-tuition scholarship from the Walt Disney Company Foundation. From there, he went on to pursue his Ph.D. under the supervision of Michael C. Anderson with the support of a National Science Foundation Graduate Research Fellowship, a studentship from the Scottish Imaging Network (SINAPSE), and a Tom Slick Research Award in Consciousness from the Mind Science Foundation. After receiving his Ph.D. from the University of Cambridge, Justin completed a postdoctoral fellowship in Ken Norman's Computational Memory Lab at Princeton University. In 2015, Justin joined the Psychology Program at Bard College and established the Memory Dynamics Lab. Justin and his team of enthusiastic undergraduate researchers aim to harness and test strategies to support conscious control, allowing us to better remember what we wish to remember and forget what we wish to forget—even while we sleep.

Laboratory website: https://memlab.bard.edu

- Anderson, M.C. & Hulbert, J.C. (2021). Active forgetting: Adaptation of memory by prefrontal control. *Annual Review of Psychology*.
- Fawcett, J.M. & Hulbert, J.C. (2020). The many faces of forgetting: Toward a constructive view of forgetting in everyday life. *Journal of Applied Research in Memory and Cognition*, 9(1), 1–18.
- Hulbert, J.C., Hirschstein, Z., Brontë, C. A. L., & Broughton, E. (2018). Unintended side effects of a spotless mind: Theory and practice. *Memory*, 26(3), 306–320.
- Beier, E.J., Janata, P., Hulbert, J.C., & Ferreira, F. (In Press). Do you chill when I chill? A cross-cultural study of strong emotional responses to music. *Psychology of Aesthetics, Creativity, and the Arts.*

Tom Hutcheon

Assistant Professor in Psychology | (he/him/his)

Education and Training

Degree	Institution
B.A.	Bates College
M.S.	Georgia Institute of Technology
Ph.D.	Georgia Institute of Technology

Professor Hutcheon's research focuses on cognitive control, which is defined as the ability to se-lect relevant sources of information in the face of distracting or competing sources of information. As everyone has experienced, the efficiency of cognitive control varies. At times we find it easy to sit down at our computers and work on a paper. At other times we end up checking our email eve-ry three minutes. What causes this variability in performance? Professor Hutcheon's research seeks to understand the mechanisms that support cognitive control, the factors that influence the efficien-cy of cognitive control, and how these are influenced by healthy aging. To address these issues, Professor Hutcheon uses a variety of behavioral and statistical techniques including computational modeling and response time distribution analyses.

Laboratory website: https://bardattentionandperformancelab.com/

- Hutcheon, T. G., & Spieler, D. H. (2017). Limits on the generalizability
 of context-driven control. The Quarterly Journal of Experimental Psychology, 70, 1292–1304.
- Myar, U., Spieler, D.H., & Hutcheon, T.G. (2015). When and why do old adults outsource control to the environment? *Psychology and Aging*, 30, 624–633.
- Hutcheon, T. G., Lian, A., & Richard, A. (2019). The impact of a technology ban on students' experience and performance in Introduction to Psychology. *Teaching of Psychology*, 46, 47–54.

Elena Kim

Visiting Associate Professor in Psychology | (she/her/hers)

Education and Training

Degree	Institution
B.A.	American University of Central Asia
M.A.	Central European University
Ph.D.	University of Bonn

Professor Kim is interested in the interface between psychology and gender studies with a focus on violence against women and crisis intervention for survivors of aggression. Topics such as child marriage and bride kidnapping practices in Kyrgyzstan, social norms underpinning violence against women, institutional organization of psychological service and sexual abuse have been at the center of Elena's research and teaching. She has led funded projects investigating campus sexual harassment, intersections between gender violence and higher education, sexual and reproductive health, and perception of gender. Elena joins the Bard Psychology Program from American University of Central Asia (AUCA), where she has served as chair of the Department of Psychology; cochair and cofounder of the Center for Critical Gender Studies; and head of the Division of Social Sciences.

- Kim, E., Molchanova, E., Orozalieva, R. (2021). "Bargaining with virginity-regulating practices in post-socialist Kyrgyzstan". *Central Asian Affairs*.
- Kim, E. (2020). "Re-feminizing the post-soviet women: Identity, politics and virginity ceremonies in contemporary Kyrgyzstan". *Journal of Gender Studies*, 29(6), 706–716. https://doi.org/10.1080/09589236.2020.1758043
- Kim, E. and Karioris, F.G. (2020) "Bound to be Grooms: The Imbrication of Economy, Ecology, and Bride Kidnapping in Kyrgyzstan". Gender, Place, and Culture, 1–22. https://doi.org/10.1080/0966369X.2020. 1829561

Kristin Lane

Associate Professor in Psychology || (she/her/hers)

Education and Training

Degree	Institution
B.A.	University of Virginia
M.S.	Yale University
Ph.D.	Harvard University
Post-Doctoral Fellow	Harvard University

Professor Lane is interested in how social thought, feeling, and behavior operate in a social context. With robust empirical evidence from the last few decades demonstrating how much of mental life takes place outside our conscious awareness has come the realization that people may hold two sets of attitudes toward a given object. Professor Lane is interested in implicit attitudes and beliefs (those that exist outside the bounds of conscious awareness and cannot be verbally reported evidence). In particular, her research focuses on implicit attitudes toward and beliefs about members of different social groups (race, class, gender, etc.). She investigates the fundamental ways in which such attitudes, identities, and beliefs operate: How do they form, and how are they connected? At the same time, Professor Lane is interested in ways in which such cognitions operate in the real world, and how an understanding of them can be applied to domains outside of the lab. Recent research explores the role of implicit attitudes and stereotypes in the gender gap in science participation.

Laboratory website: https://psychexp.bard.edu/

- Open Science Collaboration (2015). Estimating the reproducibility of psychological science. *Science*, 349(6251).
- Lane, K. A., Goh, J. X., & Driver-Linn, E. (2012). Implicit science stereotypes mediate the relationship between gender and academic participation. Sex Roles, 66, 220–234.
- Kang, J. & Lane, K.A. (2010). Seeing through colorblindness: Implicit bias and the law. *University of California (Los Angeles) Law Review*, 465–520.

Frank Scalzo

Associate Professor in Psychology || (he/him/his)

Education and Training

Degree	Institution
B.A.	St. Bonaventure University
M.A.	State University of New York at Binghamton
Ph.D.	State University of New York at Binghamton

Prior Faculty Position: University of Arkansas for Medical Sciences

The Bard Behavioral Neuroscience Laboratory provides research opportunities in several areas of neuroscience. These include invertebrate behavior, immunohistochemistry, behavioral pharmacology, neurobehavioral teratology, and neuroanatomy. Laboratory research integrates the research interests of students and faculty and is focused on understanding the behavioral and neurobiological effects of exposure to environmental and other chemical substances whose primary mechanism of action is through the nervous system. Research is conducted using developing zebrafish (Danio rerio) as an animal model. Zebrafish provide an excellent model system for investigating a variety of environmental and pharmacological manipulations on neurobehavioral development in part due to their rapid growth and transparency during the larval stage that allows for the visualization of neuronal and other structures. Current research is focused on understanding the functional role of n-methyl-d-aspartate (NMDA) receptor systems in zebrafish and how these systems can be perturbed by environmental and chemical insults. Behavioral, anatomical, psychopharmacological and artificial intelligence techniques are used in these investigations.

- Chen, B. & Scalzo, F. (2015). The effects of acute nicotine on larval zebrafish exploratory behavior in a complex environment. Presentation at Neurobehavioral Teratology Society, June 2015.
- Swain H.A., Sigstad, C. & Scalzo, F.M. (2006). Effects of dizocilpine (MK-801) on circling behav-ior, swimming activity and place preference in zebrafish. *Neurotoxicology and Teratology*, 26, 725–729.
- Scalzo, F.M. & Levin, E.D. (2004). The use of zebrafish as a model system in neurobehavioral toxicology. Neurotoxicology and Teratology, 26, 707– 708.

In memoriam, Stuart Stritzler-Levine

We remember with great fondness Professor Stuart Stritzler-Levine, who passed away in the spring of 2020. Professor Levine joined the Psychology faculty at Bard in 1964, and for the next 56 years served the College and the Program with enormous enthusiasm and dedication.

He loved Bard, its mission, its people, its history, and its landscape. His passions included sports, fishing, opera, and photography. His teaching and research interests at Bard included social psychology, specifically obedience to authority, conformity, attitude measurement, and change; moral development; and experimental design. He was fascinated by the work of Stanley Milgram and contemporary theories of moral development.

Professor Levine was deeply engaged with students and teaching until the last moment, which is what he very much wanted. It is hard for us to imagine the College without him; his tireless encouragement, insight, and humor will be missed.

Requirements for the Psychology Major

Prior to Moderation, students in the College are required to complete the following:

- Introduction to Psychological Science (PSY 141; a score of 5 on the AP Psychology exam may fulfill the requirement);
- a two-semester consecutive sequence, beginning in the sophomore year, of PSY 201 and PSY 202 (PSY 201 must be completed or in-progress by moderation; PSY 202 needn't be taken prior to Moderation but is taken the semester directly following PSY 201);
- and at least two additional 200-level courses in psychology.

PSY 201 and (a) 200-level course(s) may be in-progress during the semester of Moderation.

A table of these requirements is below.

In order to graduate in Psychology, students must complete:

- a total of four 200-level courses in psychology (excluding PSY 201 and 202);
- one four-credit course in biology, chemistry, computer science, mathematics, or physics (this excludes AP or IB classes, as well as Biostatistics, and courses listed primarily in Mind, Brain and Behavior);
- two 300-level junior seminars following Moderation (to be completed before beginning the Senior Project)¹;

 $^{^{1}}$ In cases where study abroad or similar conflict presents a challenge, the Program will consider petitions for alternate timelines.

- the Psychology Senior Conference (PSY 405), a required colloquium in the first semester of the Senior Project to support student work;
- and the Senior Project.

No more than a single 300-level course may be taken per semester, and taking these 300-levels with two different faculty members is strongly encouraged. At least one 200-level course must be completed from each of the following course clusters:

- Cluster A: Abnormal Psychology (course numbers in the 210s).
- Cluster B: Developmental and Social Psychology (course numbers in the 220s).
- Cluster C: Cognitive Psychology and Neuroscience (course numbers in the 230s).

Although the Psychology Program is housed in the Division of Science, Mathematics, and Computing, students decide at the time of Moderation whether they will pursue their degree in Psychology from the Division of Science, Mathematics, and Computing (SM&C) or the Division of Social Studies (SSt). These divisional degrees are distinguished by two features:

- (a) an SSt degree entails at least two courses in one or more related disciplines in the Social Studies Division and
- (b) the Senior Project for an SM&C degree must have an empirical focus, in which the student analyzes data, or presents a detailed plan for doing so. The SSt Senior Project does not carry this requirement, though it may of course do this.

If students wish to change their major division after moderation, they will submit a petition to the Program. This petition may be submitted at any time before the Add/Drop deadline of the Senior I semester to the Senior Project advisor, who will convene and chair the Board. Students may not change divisions after the Add/Drop date of the Senior I semester. Failure to meet the requirements of the major Division project requirements will result in a substantial reduction in the Senior Project grade.

Students may submit written petitions to the Program faculty to request deviations from the requirements. Enrolling in a 300-level prior to moderation counts as such a deviation, and students who wish to do so should petition the Program.

Students who wish to count classes completed at other institutions toward the major must send a course syllabus (not just a description) with a note about what requirement they hope to fulfill to the Program Director. We strongly urge students to do this before enrolling in courses elsewhere.

All courses required for the major (including the non-Psychology SM&C course) must be taken for a letter grade (i.e., not P/D/F).

6.1 Table of major requirements

	Course
Required for Moderation	Intro Psych (PSY 141/ 200-level #1 200-level #2 Design & Analysis I (2
Required to begin Senior Project	Design & Analysis II (200-level #3 300-level #1 300-level #2
Required to graduate in Psychology	200-level #4 One 4-credit course in Senior Project I + Sen Senior Project II

Joint and Double Majors

In the joint major a student completes all the requirements for each of Psychology and the other program, including two Moderations (or a single joint moderation), but completes a single senior project that contains sufficient work in both disciplines to be considered a senior project in each. For example, a student might jointly major in Psychology and Human Rights. If at the end of a joint senior project the board decides that the project involves substantial work in only one of the disciplines, then the student will graduate as a single major in that program. At any time before the final board meeting, during the writing of the joint senior project, the student may elect to continue as a single major in either program with the consent of the advisors.

Joint majors are reserved for very strong students who have identified advisors in each of Psychology and the other program who are willing to supervise the project jointly, and who have been approved to do a joint major by both the Psychology Program and the Faculty Executive Committee. This decision must be approved at the time of the moderation board, and again before the first semester of senior project begins (specialized documentation at each timepoint). Additionally, an overall GPA of 3.0 or higher is required for approval by the Psychology Program. Simply moderating into Psychology and another program does not automatically make a student eligible for a joint major.

A moderated student who wishes to do a joint senior project combining Psychology and another program must do the following. First, the student must have a meeting with representatives of the two prospective programs to formulate a plan for a joint senior project. Second, the student must submit a proposal to do a joint senior project to the director of the Psychology Program by November 15 for senior projects to begin the following Spring, and by April 15 for senior projects to begin the following Fall; the proposal should include the names of possible advisors, a description of the proposed topic, and a discussion of how

the topic relates to both psychology and the other program, and a summary of relevant conversations with the other program. If the Psychology Program approves the proposal, the proposal must then be sent to the Faculty Executive Committee for final approval.

Students who intend to double major (or who are considering double majoring) should discuss their plans for the double major in depth at moderation (in their short papers and during the board meeting). They should have a clear plan for carrying out the charge of completing two senior projects. Double majors must have a *minimum 3.0 overall GPA* before beginning their Psychology senior project. In cases where the GPA at the start of senior project is less than 3.0, students will choose to major in *either* Psychology or their other planned major.

Opportunities for Additional Learning

Students are strongly encouraged to pursue opportunities for research or community-based practicum experiences that complement their regular course work and that connect academic learning with practical applications. The program offers independent laboratory courses in abnormal psychology, cognitive psychology, developmental psychology, social psychology, and neuroscience under the direction of program faculty that provide ideal opportunities for learning how to conduct research in psychology. In addition, opportunities to gain experiences in applied settings exist in local communities in the realms of abnormal, developmental, and cognitive psychology. Students are also encouraged to gain experience through summer research opportunities in the Bard Summer Research Institute, and to pursue opportunities for obtaining summer research positions at other academic centers.

Moderation

9.1 Guidelines for Short Moderation Papers

For the Moderation Board (during the second semester of the sophomore year), the student prepares two short papers (Academic Past and Future) that describe their academic past experiences and future plans, and a longer paper that summarizes and analyzes an empirical article.

The short papers (about two or three pages each) are required for moderation College-wide. More information can be found on the registrar's website.

The following are meant to be guidelines only, not a rigid format. You should think of them as areas you should address. The format of the papers is up to you.

9.1.1 Academic Past

This paper should be an overview of your college education to date. It should include:

- a discussion of your coursework to date, including how your interest in psychology has evolved, particular courses taken, and so forth. Also, a discussion of academic experiences outside of psychology would be welcome
- a critical evaluation of your strengths and weaknesses as a student
- a discussion of how your objectives have evolved since coming to college
- any other issues which are relevant to an understanding of your academic work

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9.1.2 Academic Future

This paper should be a discussion of your plans for Upper College work and post-college. We understand that the first and especially second of these may not be completely formed. In any case, the paper should include:

- anticipated areas of study within psychology and outside of the field
- your ideas about work after college, including plans for graduate or professional school, career plans, summers, intersessions, and so forth
- an indication of what you might like to study for your Senior Project

Please bear in mind that Moderation is a concentrated advising experience. We want, therefore, to learn as much as we can about you as student from your short papers.

9.2 Moderation Project

The Moderation Project provides you with an opportunity to demonstrate your ability to evaluate empirical research in Psychology. Your goal is to respond in writing to a small number of prompts after reading one of a selection of empirical journal articles provided to you. The article selection will be available two weeks before the response is due, as per the calendar.

Specifically, students will be asked to respond, in no more than 2 double-spaced typed pages, to the following prompts:

- 1. State, clearly and succinctly, the primary hypothesis(es) being addressed by the chosen article.
- 2. Describe the general design of the study. Focus on the logic of the study rather than the procedural details.
- 3. Characterize the strengths and weaknesses of the particular methodology the researchers used to address their question.
- 4. Identify a key figure or table in the article and provide an argument for why this is the key figure or table.
- 5. Explain whether and why the article reported support for the primary hypothesis(es).

Faculty may be consulted with general questions about the instructions for this assignment, but there are limits to the amount of help we can provide in terms of the content and interpretation of the reading. For example, we will not explain statistical methods in detail, but we will direct you to resources so that you will be able to comment on the experimental results in a manner that reflects your level of understanding. You may not consult any individuals (or "Artificial")

Intelligence" or chatbots) about your assigned article or your written response, with the exception of faculty members in Psychology. If you use any outside resources (including websites or other articles), they should be referenced in your submission.

Students will upload their responses to Google Classroom by the assigned deadline and be prepared to discuss the article and the responses to the prompts during their scheduled Moderation board. Importantly, students should bring copies of their Academic Past/Future papers, along with the chosen article and their response to it, to the board meeting.

Notes: Students must have completed at least one semester at Bard before sitting for Moderation (i.e., transfer students may not moderate in their first semester at the Annandale campus). The Psychology Program wishes to acknowledge the Biology Program for providing the basis of this Moderation Project.

Senior Project

Near the end of your Junior II semester, you will describe your plans for your senior project (taking into account your preparation), and the Psychology Program will match you with an appropriate advisor. Students choose to pursue a project in the Division of Science, Mathematics, and Computing OR a project in the Division of Social Studies. There are three types of senior project possible (two in the SM&C Division and one in the SSt Division); requirements for these three types are here or can be downloaded here. Seniors must confirm the Division in which they intend to graduate by the end of the Add/Drop period of their Senior II semester.

10.1 Project Milestones

- Regular meetings with senior project advisor: You should consider your meetings with your project advisor as a regular class time. Attend meetings prepared!
- Senior Project Statement: You will submit a 1–2 page description of your project in which you: (1) state your research question and provide a brief summary of how you intend to answer it; (2) indicate whether you plan to complete the SSt or SM&C model (and whether this is the division into which you are moderated—you can check on BIP if you're unsure); (3) indicate whether you plan to collect data, and if so, describe your plans for doing so and estimate your expenses. Include 2-3 initial sources.
- Senior Project Midway Paper: Your midway paper may emphasize different aspects of your project; discuss with your advisor which focus for writing will be most useful for you and your board members during

your midway board discussion. Midway papers frequently are excerpts of the writing for a section of your project. Midway papers should be approximately 10–12 double-spaced pages of text, and include your proposed project title and an annotated bibliography with at least 10 sources. Projects which will include data collection should also include at least a brief summary of the plan as part of the Midway.

- Senior Project Midway Meeting: Your meeting with your committee is an excellent opportunity for feedback—the more thoughtful and detailed your proposal is at this point, the better feedback the committee can offer. If necessary, you may submit (working closely with your advisor) an IRB proposal before your midway board, but you may not begin data collection until after the board meeting. This meeting must be timed so that faculty feedback can be integrated into any potential IRB revision. The board is comprised of at least two members of the psychology program and (optionally) one other Bard faculty or staff member.
- Project pre-registration (SM&C projects only): You will, in the spirit and practice of Open Science, pre-register your empirical plan online (https://cos.io/prereg/) using the template at https://aspredicted.org/ or another suitable preregistration template. If you are doing a data collection project, this preregistration will be submitted after receiving approval from the IRB (though preparation should begin earlier) and before data collection begins. If you are doing a data proposal project, this pre-registration will be completed by the middle of the second semester. The preregistration should be included in your project's Appendix.
- Midway Senior Project PowerPoint Presentation: All students will deliver a 5-minute oral presentation to the program faculty and student peers at the start of their Senior II semester.
- Final Senior Project Poster Session (SM&C projects only): Students graduating from the SM&C Division will publicly present a poster at the end of the Senior II semester.
- Final Senior Project Oral Presentation (SSt projects only): Students graduating in the SSt Division will deliver a 15–20 minute presentation at their final senior board.
- Final Senior Project Board: All students meet with their board and discuss the submitted senior project. See requirements for final projects here.

10.2 Senior Project Grading

The final senior project grade will be determined by all members of the project board and will be based on the rubric provided below. Performance on all aspects of the project, including the final senior project Board and senior project presentations, will be assessed. The Board will then discuss and finalize grades in conjunction with all faculty in the Psychology Program later in the week (or in the following weeks). Once the final grade is determined, advisors will contact advisees to share the grade and provide additional feedback.

The Psychology Program recognizes that the new realities of world and work call for more flexible and individualized systems of assessment. We offer two grading options for senior project – each student selects which works best for them and their project.

EITHER, the student chooses to proceed with the traditional system of the full letter grade range (A, A-, B+, B, B-, C+, C, C-, D, F)

OR the student chooses to proceed with the A, Pass, D, Fail option.

Note that in the second option above there are only 4 possible grades, versus the 10 possible grades in the traditional system. This second option offers what some students like about the P/D/F system, while also preserving the possibility of an A grade for a truly excellent project. And of course the first option preserves the traditional grading system for those who prefer it. Students will discuss with their advisor, before the final senior project board, in order to make their own decision about the grading system.

10.2.1 Senior Project Assessment Guidelines

Grades will be based both on the quality of the project and on the effort put into the project. Note that final grades will be based on quality and effort demonstrated across both semesters! Thus, strong effort in one semester cannot make up for poor effort during the other, and consistent and prolific production of writing in second semester cannot make up for a lack of writing during first semester. As projects may take a variety of forms, it is important to consult with your advisor, Midway Board members, and senior project criteria here to confirm clear assessment guidelines for the finished product by the end of Senior I.

10.2.2 Quality of Product

Research Question

- Novel
- Suitable for year-long project in Psychology

Literature Review

• Provides rationale for research question

- Comprehensive in scope, draws on relevant and contemporary academic sources
- Linearly organized
- Literature is reviewed critically (i.e., in addition to providing summaries of the literature, the benefits and limitations of such literature are noted)

Study Design and Execution (where appropriate)

- Free of significant confounds
- Uses valid measures

Results and Discussion (where appropriate)

- Appropriate statistics are used
- Study was preregistered
- Interpretations of evidence (student's own and/or empirical literature) are offered
- Discussion clearly follows from presented evidence and integrates the prior literature and the student's analysis
- Thoughtful suggestions for future work are made

Documentation (where appropriate)

- IRB application and approval in appendix
- Proposal or empirical projects: Informed consent, and debriefing, proposed budget, detailed statistical plan, and all measures and methods are described and/or included as an Appendix
- Preregistration is included in appendix

Process

- Raw data are retained (to the extent new data have been collected)
- Final project incorporates feedback from the midway (or provides a clear rationale for why such feedback was not incorporated)
- APA format is followed (except where College-wide policy contradicts APA format; in-text Figures and Tables may be used)
- A 250-word abstract is included
- The project follows the format described in the Bard Student Handbook
- The project is carefully proofread

Presentations

- Mastery over material is demonstrated during the final board meetings (e.g., student demonstrates awareness of relevant scholarly literatures and is able to integrate such literatures with their own work in meaningful and novel ways that were not necessarily already included in the project itself; student demonstrates thoughtfulness and sophistication in conveying criticisms of own work)
- Midway Powerpoint presentation and final poster/oral presentation are thoughtful and clear

10.2.3 Effort

Initiative and Independence

- Student took initiative to schedule and attend regular meetings with the advisor according to agreements established at the beginning of the semester, proposed additional consultation from other knowledgeable individuals in the field, including other members of the board, where appropriate
- Student attended meetings prepared with questions and demonstrated initiative of both thought (e.g., questions about material) and process (e.g., independently at-tempted statistical analyses and literature integration prior to asking for help)
- Independence in thought and work grew throughout the year. It is expected that students will need help with research question and thesis formulation, experi-mental design, and techniques early on, but by later in the year the student should be proficient in all aspects of the projects—able to understand research methodology, troubleshoot problems, and interpret results with little to no help

Working with Faculty

- Student responded well to and incorporated feedback (as demonstrated by continual additional work both revised and novel that is brought to meetings with advisor throughout the year)
- Individual advisors may have additional expectations (e.g., attendance at a weekly lab meeting)

Reliability and Consistency

• Students are expected to work a minimum of 12 hours per week on the project. Work during the January (or summer) break does not make up for low effort during the first semester of the project. As a general guideline to planning the year, for most projects in the first semester, students will be doing a lot of background reading, refining the research question, and developing the thesis and experimental design

• For projects that require collection of data, data collection should aim to begin by the end of the first semester. In the second semester, library research and writing should continue. Data collection should end at least 5–6 weeks prior to the due date for the final paper so that data analysis, data interpretation, and final report writing can proceed

10.2.4 Academic Integrity

Bard takes academic integrity seriously, and the Psychology Program requires that students submit their own original work. Indeed, you'll be asked to defend your writing during your Senior Project board meeting. Plagiarism (e.g., using the words or ideas from another entity without proper citation) is not acceptable in this—or any—academic context. Thus, using text produced by a generative system (e.g., entering a prompt into a generative artificial intelligence tool like ChatGPT or Google's Bard and using the output in your Senior Project) does not meet the requirements for original work. Moreover, content produced by such tools is generated based on others' (uncredited) work, can be inaccurate, and risks reproducing pre-existing biases/other problems from its source material. As always, you should evaluate your sources and methods carefully before drawing conclusions.

The Program urges you to use this critical time in your intellectual development to strengthen your own capacities to learn, think, and write effectively—in your own voice. We want to hear from you—your ideas, your words.

When in doubt as to what constitutes plagiarism, you are encouraged both to consult the student handbook and to ask your advisor for further guidance. There is absolutely no penalty for asking for clarification; however, failing to abide by Bard's standards for academic integrity can result in failing the Senior Project.

10.3 Senior Project Funding

Students may request funding from the Program to assist with their senior projects (e.g., to cover the cost of participant compensation). To make such a request, students should submit this form (while signed into your Bard email) to the Psychology Program Director by the end of their Senior I semesters. The form will ask you to include the following information, as relevant:

- (a) whether data collection will take place online or in-person,
- (b) the targeted number of participants, with rationale for that number (e.g., an *a priori* power analysis),
- (c) the expected length of the study (e.g., 40 minutes),

- (d) the payment rate or how participants will be paid (e.g. pro-rated 20-minute study, or a drawing every 20 participants),
- (e) the total expected cost, and
- (f) a budget/plan for use of the funds.

You must discuss your plans with your senior project advisor before submitting this form, as well as after receiving approval.

Once the budget is approved by the Program, it is up to the student and their advisor to devise a plan for utilizing funds, ordering supplies, etc. This may be done via reimbursement (if the student themselves fronts the costs) or through direct purchasing by the College. Careful records must be kept of all funds used.

Participant payment considerations:

In-person participants should be paid at New York minimum wage (\$14.20/hr in 2023), per quarter-hour. That is, if you are running a 15-minute study, you should pay approximately \$3.55 for that quarter of an hour in 2023. Online studies should be paid at no lower than the Federal minimum wage (\$7.25 in 2023). Seniors who expect to pay more than this minimum wage should include their reasoning in their participant compensation plan (see above). Drawings, raffles, and other alternate compensation methods may also be used where appropriate. Seniors who collect data online should consult with their advisor about possible fees charged by online payment systems.

Students are also encouraged to seek out additional funding opportunities, such as the Dean Stuart Stritzler-Levine Seniors-to-Seniors Scholarship.

Types of Senior Project

The senior project in Psychology can take one of three possible types: the SM&C Data Collection project, the SM&C Proposal project, and the SSt project.

Download this document as a PDF, outlining what students need to do for each project here.

11.1 SM&C Data Collection project

This project is completed in the Science, Math & Computing Division and involves data collection that occurs during the semester.

Senior I Semester

- Project Proposal
 - 1–2 pages of writing, 2–3 initial sources, initial budget ideas
- Budget Request
 - There is an online form for this, through a link in the Program Handbook. Include in your request all the money you'll need for participant recruitment, participant compensation, purchase of software or hardware, data collection platform fees, testing supplies, etc. Submitting this request means you are asking the Program for approval to use funds. Other information can be found under the section on funding in this handbook.

Once approval is confirmed, it's then up to you (with help from your advisor) to (1) order the supplies needed (and submit documentation for reimbursement) or (2) arrange for those supplies to be ordered directly by the College.

• Midway Paper

 Approximately 10 pages of writing, plus an Annotated Bibliography with at *least 10 references*.

• Midway Board

- Two Psychology faculty plus an (optional) non-Psychology faculty member. Your Psych members will be assigned to you; it is up to you to invite your non-Psych member. We encourage it!

Senior II Semester

• Midway Presentation

- You will orally present a slideshow to your peers and faculty near the beginning of the semester. These are 5–7 minutes long and include at least 4 slides.
- You will also be responsible for preparing a question on a peer's presentation.

• Poster Session

- You will present your poster with all other SM&C graduates in a public session near the end of the semester. The poster itself is due to the printer (costs covered by Bard) within a few days of final project due date; plan ahead.
- Models of posters exist throughout Preston and RKC.

• Final Paper

- $-\ 45\text{--}65$ pages of writing, not including References and Appendices.
- See section on Senior Project milestones for details on what tends to be included.
- References are not annotated in your final project, and will be in APA style. At least 20 references needed, more encouraged.
- Appendices will include at minimum the preregistration, the instruments used (e.g, questionnaires in full), any supplementary materials necessary to explain your method, Consent & Debrief forms, final IRB approval letter.

Before Data Collection Begins

• Pre-Registration

- There is a link to this website in the Program Handbook. It must be completed before data collection begins.
- Discuss its components with your advisor before submission, and include in your Appendix.

• Data Analysis software

- Decide what program you will use R, SAS, JAMOVI, etc and make sure you have access to that software.
- Create a data file that identifies each of your variables, each variable's type (categorical, continuous, etc.), and how you will calculate/transform/enter/import your data.

• IRB Approval

- Do this through the Bard IRB website. Submitted materials will minimally include (in addition to detailed description of your project):
 Consent Forms, Debriefing Forms, proof of Human Subject Certification, and an email from your advisor.
- Most projects require resubmission in the form of amendments requested by the IRB after their initial review. Once you receive email confirmation of final approval from the IRB, you may begin data collection.

11.2 SM&C Proposal Project

This project is completed in the Science, Math & Computing Division and involves *proposing* (but not carrying out) a study.

Senior I Semester

• Project Proposal

- 1-2 pages of writing, 2-3 initial sources, initial budget ideas

• Midway Paper

- Approximately 10 pages of writing, plus an Annotated Bibliography with at least 10 references.
- It should be clear from this paper why data collection is not feasible, hence the proposal.

· Midway Board

- Two Psychology faculty plus an (optional) non-Psychology faculty member. Your Psych members will be assigned to you; it is up to you to invite your non-Psych member. We encourage it!

Senior II Semester

• Midway Presentation

- You will orally present a slideshow to your peers and faculty near the beginning of the semester.
- These are 5–7 minutes long and include at least 4 slides. You will also be responsible for preparing a question on a peer's presentation.

• Poster Session

- You will present your poster with all other SM&C graduates in a public session near the end of the semester. + The poster itself is due to the printer (costs covered by Bard) within a few days of final project due date; plan ahead.
- Models of posters exist throughout Preston and RKC.

• Final Paper

- 45–65 pages of writing, not including References and Appendices. Detailed methodology, coding system, data analysis plan, tables and figures of hypothesized data for each hypothesis are required.
- See section on Senior Project milestones for details on what tends to be included.

References are not annotated in your final project, and will be in APA style. At least 20 references needed, more encouraged. Appendices will include at minimum the preregistration, the instruments used (e.g, questionnaires in full), any supplementary materials necessary to explain your method, Consent & Debrief forms, proposed budget.

Even Though You Are Not Collecting Data

• Pre-Registration

- There is a link to this website in the Program Handbook. It must be completed as part of your data collection plan.
- Discuss its components with your advisor before submission, and include it in your Appendix.

• Data Analysis software

- Decide what program you will use R, SAS, JAMOVI, etc. and make sure you have access to that software.
- Create a data file that identifies each of your variables, each variable's type (categorical, continuous, etc.), and how you would calculate/transform/enter/import your data.

• Components of IRB Submission

- Look through the Bard IRB website The materials you'll prepare, for your proposed methodology, will minimally include (in addition to detailed description of your project): Consent Forms, Debriefing Forms, images/description of any experimental stimuli or apparatus used, proof of Human Subject Certification.
- You will not actually submit these materials to the IRB; they will instead appear in your Appendices.

11.3 SSt Project

This project is completed in the Social Studies Division and does not generally involve data collection.

Senior I Semester

• Project Proposal

- 1-2 pages of writing, 2-3 initial sources, initial argument ideas.

• Midway Paper

- Approximately 10 pages of writing, plus an Annotated Bibliography with at least 10 references.
- It should be clear from this paper why you've chosen SSt (and not SM&C).

· Midway Board

- Two Psychology faculty plus an (optional) non-Psychology faculty member. Your Psych members will be assigned to you; it is up to you to invite your non-Psych member. We strongly encourage members outside the SM&C Division!

Senior II Semester

• Midway Presentation

- You will orally present a slideshow to your peers and faculty near the beginning of the semester.
- These are 5-7 minutes long and include at least 4 slides. You will also be responsible for preparing a question on a peer's presentation.

• Final Board Presentation

 In lieu of the poster presentation done by SM&C seniors, you'll prepare a 15 minute slideshow that you will present orally at your final board meeting.

• Final Paper

- 50-70 pages of writing, not including References and Appendices.
- See section on Senior Project milestones for details on what tends to be included.
- References are not annotated in your final project, and will be in APA style. At least 30 references needed, more encouraged.

Remember

• Psychology Program Handbook

- Read the entire section of the Handbook about the Senior Project. This is full of vital information on the expectations for Senior project, grading criteria, etc. You're responsible for knowing this material!

• Sources

— At least half (and typically much more) of your cited sources must be empirical, drawn from the broad field of Psychology. Support your claims with data; this is the nature of modern Psychology. This is a thesis-driven paper, arguing a novel theoretical proposal or synthesis. Sources strengthen the foundation on which you'll build your claims.

• Coursework outside SM&C

- As a Social Studies Division graduate, you need to have taken at least two courses in the Social Studies Division relevant in some way to your studies in Psychology. Be thoughtful about these; integrate where you can.

Psi Chi

Psi Chi is the International Honor Society in Psychology, founded in 1929 for the purposes of encouraging, stimulating, and maintaining excellence in scholarship, and advancing the science of psychology. Psi Chi functions as a federation of chapters located at over 1,090 senior colleges and universities in the USA, Canada and Ireland. Membership is open to graduate and undergraduate students who are making the study of psychology one of their major interests, and who meet the minimum GPA qualifications. Psi Chi serves two major goals: first, to provide academic recognition to its inductees by the mere fact of membership. Second, to nurture the spark of that accomplishment by offering a climate congenial to members' creative development. For example, the chapters make active attempts to nourish professional growth through programs designed to enhance the regular curriculum and to provide practical experience and fellowship. In addition, Psi Chi holds Society and regional conventions annually in conjunction with the psychological associations, research award competitions, and certificate recognition programs. All moderated Psychology students are invited to apply!

Contact Prof. Justin Hulbert for more information.