

Principles of Behavior

PSYC 321 – Spring 2023

Lecture: Monday/Wednesday 3:00 – 4:15, Richmond Hall 108

Lab: Tuesday 1:30 – 2:45 or 3:00 – 4:15, **Richmond Hall 201** (please bring a laptop or tablet)

Instructor: Laura E. Knouse, Ph.D.

Office & Office Hours: Richmond Hall G-11 – Book a meeting at <https://drknouse.youcanbook.me/>

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Disability Support Services: If you believe you have a disability requiring an accommodation, please visit the [University of Richmond Disability Services website](#) to begin the accommodations process as soon as possible.

If you already have a current University of Richmond Disability Accommodation Notice (DAN), please make an appointment with me as soon as possible so that I am aware of your accommodations. No student will receive accommodations of any kind without a DAN.

TEXTS AND READINGS:

Required Text:

Malott, R.W. & Shane, J.T. (2013). *Principles of behavior (7th edition)*. Taylor and Francis Publishers.

Note: This book is absolutely essential for the course. **There is a new edition (8th) but we will be using the 7th edition.** Check www.dealoz.com to search multiple sites for the best deal!

Recommended Texts:

Skinner, B.F. (1953). *Science and human behavior*. New York: Free Press.

Skinner, B.F. (1971). *Beyond freedom and dignity*. Middlesex, England: Pelican Books.

Supplemental Readings and References – most posted on Blackboard:

Baer, D.M. & Wolf, M. (1967). *The entry into natural communities of reinforcement*. Paper presented at the annual meeting of the American Psychological Association, Washington, D.C.. Retrieved from <http://files.eric.ed.gov/fulltext/ED020533.pdf>

Baer, D.M., Wolf, M.M., & Risley, T.R. (1968). Some current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis*, 1, 91-97.

Blume, A.W. (2001). Negative reinforcement and substance abuse: Using a behavioral conceptualization to enhance treatment. *The Behavior Analyst Today*, 2(2), 86-90. <http://dx.doi.org/10.1037/h0099916>

Brown, F.J & Gillard, D. (2015). The ‘strange death’ of radical behaviourism. *The Psychologist*, 28, 24-27. Retrieved from <https://thepsychologist.bps.org.uk/volume-28/january-2015/strange-death-radical-behaviourism>

Ferster, C.B. (1973). A functional analysis of depression. *American Psychologist*, October 1973, 857-870.

Gardner, P. (2007). Moving up or out of the company? Factors that influence the promoting or firing of new college hires. *Collegiate Employment Research Institute Research Brief 1-2007*. Michigan State University. Retrieved from <http://ceri.msu.edu/publications/pdf/brief1-07.pdf>

- Graber, A. & Graber, J. (2023). Applied behavior analysis and the abolitionist neurodiversity critique: An ethical analysis. *Behavior Analysis in Practice*. <https://doi.org/10.1007/s40617-023-00780-6>
- Kazdin, A.E. (2002). The case study and single-case research designs. *Research Design in Clinical Psychology*. Pearson.
- Kazdin, A.E. (2012). How to evaluate interventions in applied settings. *Behavior Modification in Applied Settings*. Waveland Press.
- Knouse, L.E. & Mitchell, J.T. (2015). Incautiously optimistic: Positively valenced cognitive avoidance in adult ADHD. *Cognitive and Behavioral Practice*, 22, 192-202.
- Langthorne, P. & McGill, P. (2009). A tutorial on the concept of the motivating operation and its importance of application. *Behavior Analysis in Practice*, 2, 22-31.
- Lewon, M. & Hayes, L.J. (2014). Toward and analysis of emotions as products of motivation operations. *Psychological Record*, 62, 813-825. doi: 10.1007/s40732-014-0046-7
- Matsuda, K., Garcia, Y., Catagnus, R., & Brandt, J. A. (2020). Can behavior analysis help us understand and reduce racism? A review of the current literature. *Behavior Analysis in Practice*, 1-12. <https://doi.org/10.1007/s40617-020-00411-4>
- Nock, M.K. & Prinstein, M.J. (2005). Contextual features and behavioral functions of self-mutilation among adolescents. *Journal of Abnormal Psychology*, 114, 140-146.
- Skinner, B.F. (1953). Selections from *Science and human behavior*. New York: Free Press.
- Skinner, B.F. (1971). Selections from *Beyond freedom and dignity*. Middlesex, England: Pelican Books.
- Smith, J.D., Dishion, T.J., Shaw, D.S., Wilson, M.N., Winter, C.C., & Patterson, G.R. (2014). Coercive family process and early-onset conduct problems from age 2 to school entry. *Developmental Psychopathology*, 26, 917-932. <https://doi.org/10.1007/s40617-020-00411-4>

COURSE INFORMATION

Overview:

If you're reading this, it probably means you have at least a passing interest in understanding people's behavior and how that behavior can be modified for the better. You probably also know quite a bit about human behavior already. As B.F. Skinner notes, "We all know thousands of facts about behavior. Actually there is no subject matter with which we could be better acquainted, for we are always in the presence of at least one behaving organism" (Skinner, 1953, p. 14). Why is it, then, that despite being experienced observers of our own behavior and the behavior of others, humans still struggle to modify their actions and habits even when those actions and habits are problematic, destructive, and lead to painful consequences? Why do we find it so difficult to do what we often know we "should" do in order to live more full and harmonious lives with one another? What can be done to help people to learn skills and carry out actions in our collective long-term best interest?

If behavior were a simple matter, these questions would have been resolved long ago. And yet many of the most vexing problems humans face are matters of behavior change. From risky health behaviors to environmental destruction to racist violence and oppression, these sources of suffering and strife require people

to change their behavior in order for progress to occur. And so, the subject matter of this class is important. And it's much more *complex* than meets the eye.

From neurons to cognitions to culture, the field of psychology offers many levels of analysis we could choose to try to understand (and change) human behavior. In this course, we will adopt a scientific, **radical behavioral** perspective, looking “outside the organism” and into its environment and its history for the variables of which behavior is a function. We will take a “deep dive” into the conceptual underpinnings of the behavioral perspective, learn to see the world through this new lens, and see what turns out to be useful. In other words, we will adopt what behavior theorist and clinical psychologist Steven C. Hayes calls the “pragmatic truth criterion,” where truth is characterized by *successful working*. In other words, if this course is successful, it will equip you with a new framework for analyzing behavior and for developing interventions to change it for the better. These tools will also enable you to view your fellow humans—and yourself—with increased compassion and optimism.

Of course, what is considered successful or desirable depends on value judgments. As is true for any scientific tool, *how* the principles of behavior are used and *for what purposes* are matters of ethics. We will carefully consider these ethical matters and further explore some of the “big” questions that arise from a behavioral perspective. Taken together, this course will challenge students to cultivate a non-judgmental and pragmatic stance toward the behavior of others, which is essential for both scientific inquiry and effective intervention.

To be sure, this course will require you to be patient with yourself as you sometimes struggle to learn this new and (sometimes) non-intuitive language of behavior. All you need to get started is a firm commitment to go “all in” on the different types of learning experiences provided in this class, which are designed to help you not just learn *about* the principles of behavior, but to really *learn* them. I often wonder if students ever actually read this part of the syllabus. In any case, the secret word is *magenta*. Let's get started, shall we?

Course Goals:

In this course, students will learn to:

1. Precisely articulate basic behavioral principles.
2. Accurately identify examples of behavioral principles in action. Everywhere.
3. Describe the application of functional analysis and interventions based on behavior analysis to diverse problems of behavior change, from non-human animal behavior to cognitive-behavioral therapy.
4. Conduct a high-quality functional analysis of a “real life” behavior and develop a reasonable intervention based upon that analysis.
5. Select appropriate data collection methods and single-subject research design for a valid test of the behavioral intervention. Carry out that test and evaluate the results.
6. Develop and demonstrate empathy and respect for people struggling with behavior change.
7. Think critically about ethical and philosophical issues in behavior theory and behavior management.
8. Learn what it takes to be a professional behavior analyst and what kinds of work professional behavior analysts do.

Lecture Schedule

- The following schedule is subject to change.
- ****For textbook readings, only Fundamentals and Basic Enrichment sections are required reading, unless otherwise specified.**
- In the table below, concepts ****marked with asterisks**** are particularly tricky for students—stay alert!

<u>WEEK</u>	<u>DATE</u>	<u>TOPIC</u>	<u>ASSIGNMENT DUE</u>
1	Mon., Jan. 9	Course introduction	Read or listen to selections from <i>Science and Human Behavior</i> (Skinner, 1953)
2	Wed., Jan. 11	1: The Reinforcer	Quiz: Chapter 1 + syllabus Field Notes
	Mon., Jan. 16	NO CLASS – MLK DAY	
	Wed., Jan. 18	2: Reinforcement	Quiz: Chapter 2 Field Notes
3	Mon., Jan., 23	3: Escape	Quiz: Chapter 3 Field Notes
	Wed., Jan. 25	4: Punishment	Quiz: Chapter 4 Field Notes
4	Mon., Jan. 30	5: Penalty	Quiz: Chapter 5 Field Notes
	Wed., Feb. 1	6: Extinction & Recovery	Quiz: Chapter 6 Field Notes
5	Mon., Feb. 6	7: Differential Reinforcement & Punishment	Quiz: Chapter 7 Field Notes
	Wed., Feb. 8	8: Shaping Mid-Course Evals	Quiz: Chapter 8 Field Notes
6	Mon., Feb. 13	9: **Unlearned Reinf./Punishments, Motivating Operations**	Quiz: Chapter 9 Field Notes
	Wed., Feb. 15	CLASS CANCELLED	
7	Mon., Feb. 20	10: **Special Motivating Operations**	Quiz: Chapter 10 & Blume (2001) Field Notes
	Wed., Feb. 22	11: **Learned Reinforcers and Punishments**	Quiz: Chapter 11 Field Notes
8	Mon., Feb. 27	12: **Discrimination**	Quiz: Chapter 12 – Also read Intermediate Enrichment section Field Notes
	Wed., Mar. 1	13: **Complex Stimulus Control**	Quiz: Chapter 13 Field Notes
9	Mon., Mar. 6	NO CLASS – Spring Break	
	Wed., Mar. 8	NO CLASS – Spring Break	
10	Mon., Mar. 13	14: Imitation	Quiz: Chapter 14 Field Notes
	Wed., Mar. 15	15&16: Avoidance and DRO	Quiz: Chapter 15 & 16 Field Notes
11	Mon., Mar. 20	19: Concurrent Contingencies	Quiz: Chapter 19 Field Notes
	Wed., Mar. 22	20: Behavioral Chains	Quiz: Chapter 20 Field Notes

12	Mon., Mar 27	21: Respondant Conditioning	Quiz: Chapter 21 Field Notes
	Wed., Mar 29	22: **Rule-Governed Behavior**	Quiz: Chapter 22 Field Notes
13	Mon., Apr. 3	23 & 24: **Rule-Governed Behavior**	Quiz: Chapter 23 & 24 Field Notes
	Wed., Apr. 5	17&18: Schedules of Reinforcement	Quiz: Chapter 17 and 18 Field Notes
14	Mon., Apr. 10	28: Transfer of Training	Quiz: Chapter 28 Field Notes
	Wed., Apr. 12	27: Maintenance + Careers in Behavior Analysis – Eli Newcomb, The Faison Center	OPTIONAL ONLINE Quiz before class: Chapter 27 Field Notes
15	Mon., Apr. 17	BIG QUESTION DAY #1	Assigned readings; Two (2) amazing discussion questions
	Wed., Apr. 19	BIG QUESTION DAY #2	Assigned readings; Two (2) amazing discussion questions
Celebration of Learning!	Thr, Apr. 27	9 AM – 12 PM	Presentations of Behavior Change Projects; Final Full Write-Ups Due by 9 a.m. on Friday 4/28

Lab Schedule

<u>WEEK</u>	<u>DATE</u>	<u>TOPIC OR ACTIVITY</u>	<u>ASSIGNMENT DUE</u>
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1	Tue., Jan. 10	Lab Overview & Intro to Behavior Change Project	
2	Tue., Jan. 17	Workshop: Behavioral Assessment	
3	Tue., Jan. 24	Individual Consultations (10 min.) – bring draft of Part 1 to appointment When approved, begin baseline data collection	Part 1: Description of Target Behavior, Its History, and Baseline Data Collection Plan
4	Tue., Jan. 31	Workshop: Visual Presentation of Data & Behavioral Observations	Bring raw baseline data and observations to lab
5	Tue., Feb. 7	Workshop: Principles of Applied Behavior Analysis	Part 1 PLUS Baseline Data with Graphs & Behavioral Observations
6	Tue., Feb. 14	Workshop: Functional Assessment I	
7	Tue., Feb. 21	Shaping in Action: Janet Velenovsky , Animal Behavior Consultant (and dogs!)	
8	Tue., Feb. 28	Workshop: Functional Assessment II	Cumulative, no-stakes quiz on Blackboard
9	Tue., Mar. 7	NO LAB – Spring Break	
10	Tue., Mar. 14	Workshop: Functional Assessment III and Using the Research Literature	Bring article from a scholarly journal related to your project to class

11	Tue., Mar. 21	Workshop: Intervention Planning and Research Design	
12	Tue., Mar. 28	Individual Consultations (10 min.) re: intervention plan When approved, begin intervention data collection	Parts 1 and 2 PLUS Functional Analysis, Intervention Plan, and Single-Subject Research Design + rubric completed as self-assessment (required for turn-in points)
13	Tue., Apr. 4		(Ongoing data collection)
14	Tue., Apr. 11	Activity: Schedules of reinforcement	(Ongoing data collection) Cumulative, no-stakes quiz on Blackboard
15	Tue., Apr. 18	Workshop: Final Reports and Presentations (+ early birds)	(Ongoing data collection?)
Celebration of Learning!	Thu, Apr. 27	9 AM – 12 PM	Presentations of Behavior Change Projects; Final Full Write-Ups Due by 9 AM on Friday, Apr. 28 Parts 1, 2, and 3 PLUS Intervention Data with Graphs, Final Assessment & Reflection

ASSESSMENTS

Quizzes

Research in psychology overwhelmingly supports the efficacy of frequent, lower-stakes assessment over infrequent tests and exams. Not only does frequent assessment provide better feedback to students and the instructor, but repeated retrieval practice actually enhances memory (Roediger & Butler, 2011). Furthermore, as students of behavioral principles, we shouldn't be surprised that frequent opportunities to access reinforcers (i.e., points) motivates students to study material more frequently. Working consistently to learn material is particularly important for learning behavioral principles because, as is the case in math classes, new information builds on the information that preceded it.

For all of these reasons, **you will take a quiz at the beginning of nearly every class period in this course.** Dates for all quizzes appear on the syllabus as well as what new material will be covered on each quiz, although be aware that the quizzes are cumulative, so that “old” material can show up at any time.

How should you prepare for these quizzes? Well, in this case the research is helpful too. As much as possible, you should **quiz yourself** while you are doing your readings and as you prepare for the quizzes. The textbook is set up to facilitate this so you should answer the comprehension questions peppered throughout the chapters as you read—without looking back, of course, unless you can't come up with answer or want to check your work. Also, flashcards—real and app-based—are your friend. See the links on Blackboard to access flashcards at Quizlet.com or create your own. And your friends in class can be good quizzing tools as well, provided that you can keep your social interactions focused on the course material.

Please note that, unless you are absent because of an excused absence (truthfully reported illness, university sanctioned activity where a note from the dean is provided, or for observance of religious holidays) **quizzes will only be given during class and points may only be earned for quizzes if you are in attendance when the**

quiz is given. Please let me know about any excused absences these as soon as possible.

Each student will receive two (2) “Get Out of Quiz Free” cards that can be redeemed at any time in lieu of taking a quiz for any reason. Quizzes missed due to excused absences must be made up, but quizzes missed with the use of a card do not need to be made up. Any remaining Get Out of Quiz Free cards remaining at the end of the semester may be used to drop your lowest quiz grades.

Finally, you will complete **two “benefits only” cumulative quizzes—one at mid-semester and one at the end of the semester.** These quizzes are designed to allow me to assess the class’s retention of key concepts. If you earn a higher score on either of these quizzes than on a quiz in that half of the semester, the cumulative quiz grade will replace the lower grade! Therefore, you can *only* benefit. Yay!

Behavior Field Notes

For each major topic covered in the course, as noted on the syllabus, you will bring to class examples of key behavioral concepts that you observe in everyday life. We will use 3-4 students’ field notes, randomly selected, as teaching examples during each class. This means that each student will have their field notes used as examples at least three times during the semester. **You will earn points for presentation of field notes on the days that your examples are discussed**—these points are earned “all or none” and you must fill out the field notes worksheet to receive credit. Field notes completed **during** class will not receive credit. Note: “Get Out of Quiz Free” cards also exempt you from field note presentation that day.

Big Question Days

During the last week of the semester, we will explore some big questions that may arise during our study of the science of behavior. I will select and assign readings appropriate to the topic and we will engage in a stimulating, thought-provoking discussion that will challenge you to stretch your critical thinking skills.

For the Big Question Days, you will be expected to complete the readings and come to class prepared with two (2) exceedingly thought-provoking discussion questions. There will be points associated with submitting these questions and, like the quizzes, you cannot earn points if you do not attend class.

The Great Behavior Change Project

You will undertake one of the most difficult of human tasks – trying to change your own behavior. This project will be in-depth and will, across the semester, take you through all of the major steps of functional analysis, intervention design, and intervention outcome testing. See Lab schedule, above, and specific documents for the project provided by Dr. Knouse for many more details.

EARNING POINTS

Your final grade in the course will be a function of points earned using each of the assessments listed below.

	Points Possible	Weight
Quizzes (23 @ 20 each)	460	47%
Behavior Field Notes (assessed 3x at 20 each)	60	6%
Big Question Discussion Questions (2 @ 10 each)	20	2%
The Great Behavior Change Project - all parts together Final Written Report	440 (300)	45%

Oral Presentation (Celebration of Learning)	(100)	
On-Time Completion (4 @ 10 ea.)	(40)	
Total Points Possible	980	

Final grades will be assigned based on the **percentage of total points earned** according to the following: 97-100% = A+, 93-96 = A, 90-92 = A-, 87-89 = B+, 83-86 = B, 80-82 = B-, 77-79 = C+, 73-76 = C, 70-72 = C-, 67-69 = D+, 63-66 = D, 60-62 = D-, 59 and below = F. Percentages with decimal places of .50 (not .45, not even .49) and higher will be rounded up.

Some notes about this grading system and thoughts on grades in general:

- 1) It is possible for every student to demonstrate mastery of all concepts and skills in this course and, therefore, to earn a grade of A. This is what a grade of A represents.
- 2) Whenever you convert a continuous scale into a categorical one—which is what you do when converting a percentage of points to a letter grade—there are cut points that can *seem* unfair if they happen not to break in your favor (like, if you earn an 89.49—which is a B+ on this scale). However, the way I have found to be the most fair and equitable to *all students* in calculating grades is to follow the grading scale explained above rigorously. As such, **please do not ask me to make a special exception for you in the calculation of grades.** I will refer you back here to re-read this policy.
- 3) Relatedly, no “extra credit” will be offered to individual students.
- 4) **My best advice:** Focus on doing what *you* need to do to master the material. Not every student will need to put forth the same amount of effort. You will probably be able to master some concepts and skills with less effort whereas other material will require more effort. The course may even require you to adopt some new learning strategies. I will always be available to support you in these efforts.

GENERAL COURSE POLICIES

1. **Attendance is critical.** Active participation is necessary to learn this new language of behavior and to learn to apply it in useful ways. We will do a lot of learning together in this class (myself included). In addition, it is impossible to complete quizzes or earn points for field notes if you are not in class and thus attendance can have a direct impact on the points you earn (see above for details). You are responsible for all material and announcements covered in class whether or not you are present. Be advised that falsely reporting a reason for an absence is an honor code violation.
2. **Preparation for class is essential.** This course involves a significant amount of reading and active learning in preparation for each class. It is expected that reading assignments will be completed *before* the class for which they are listed because you will be quizzed on them and because we will build on that knowledge to go deeper during our in class work. Relatedly, you will need your own copy of the textbook for this class. See resources at the beginning of the syllabus regarding how to obtain it at reduced cost.
3. **Workload.** To be successful in this course, you should expect to devote an average of 10-14 hours per week to preparing for class, participating in class sessions, studying course related materials, and completing course assignments. In other words, anticipate spending about three hours prepping for each hour of in-class time. **I recommend you “block out” this preparation time on your calendar for the rest of the semester ASAP!**
4. **Academic integrity.** Students will be expected to adhere to the letter and spirit of the University of Richmond Honor Code in all of their activities related to this class. You will be asked to “pledge” on each assignment you complete. In addition:

- a. I “recycle” quizzes from prior semesters. Therefore, **you are not permitted to access or use quizzes from prior semesters of this course.**
- b. I will hand your quizzes back to you to use as a resource. **You are not permitted to pass on any quizzes, notes, or other class materials to other students who might take this course in the future NOR may you upload them to any online repository**—public or restricted. If you discover any such materials posted online, please let me know.
- c. In class, I will ask you to grade your own quiz as we go over the answer. **You are not permitted to change your answers on quizzes during the correction process.**
- d. Don’t use AI to write your paper for you. It will be considered a violation of the honor code, it probably won’t work too well for the assignments in this class anyway, and you won’t learn anything by doing it.

Suspected instances of honor code violations will be **promptly** referred to the Honor Council.

5. **Late work.** I make expectations very clear well in advance so that students can plan out how they will meet the demands of the course. As such, as outlined above, late work generally does not earn points, although you will still receive constructive feedback on it. Technology issues are not an excuse for late work. Save your work often and do not wait until the last minute to complete and submit assignments.
6. **While you are in class or lab, you are expected to be fully present and actively engaged.** To this end, please **put away your laptop, phone, tablet, and any other electronic devices before class begins** unless otherwise instructed. Tablets used for handwritten notes are an exception to this policy. Laptop use in class has been shown to have [negative effects on grades](#), especially for [males and struggling students](#). In addition, when you use electronic devices in class, it [distracts everyone](#)—you, me, and those sitting around you. You will get more out of class without the presence of the powerfully reinforcing but distracting stimuli generated by an electronic device. When I do ask you to use your laptop for an activity, please refrain from opening applications not directly related to completing the task at hand. Exceptions to this policy will be offered to students with accommodations for a documented disability and in select other cases.
7. Feel free to have a snacks or beverages during class. Yay reinforcers! 😊
8. You should feel free to ask questions, make comments, and seek clarification. We will vigorously debate ideas, concepts, and opinions—at the same time, all people will be treated with respect in this class.
9. If you are encountering difficulties in meeting the demands of the course, **please speak with me as soon as possible so that I can support you!** The sooner we team up, the more likely I’ll be able to help you.
10. Students will be expected to show respect for people experiencing difficulties with maladaptive behavior (e.g., psychological disorders, substance abuse) in assignments and during class discussions. Studying behavior and working to change it requires empathy and a non-judgmental stance in the context of critical thinking and so respect for persons is a matter of academic and scientific as well as ethical significance.
11. Nearly 50% of the population will experience a diagnosable form of psychopathology at some point during their lifetime. As a result, students often feel motivated to share personal experiences—or those of family or friends—in the context of course like this. However, these experiences are intensely personal and students should carefully consider the possible long-term consequences to self and others of disclosing personal information.

If course material elicits thoughts and feelings that have a negative impact on your functioning or raises questions for you about personal difficulties, you are encouraged to seek appropriate services (e.g., CAPS—see below). If needed, I am happy to help direct you.

RESOURCES AVAILABLE FOR STUDENTS

Blackboard – I will be using Blackboard to post readings, notes, and resources for each class. I also like to post course-content-related current events, news items, or interesting tidbits on the Blackboard course page, so if you happen upon any of these, please forward!

Individual Meetings – All students will meet with me individually about their lab projects twice during the semester. I encourage students to also meet with me any time about to discuss course-related issues or address questions related to careers in clinical psychology and related disciplines. See the first page or Blackboard for the link to schedule a meeting with me.

Other resources that can support you in your efforts to meet course requirements include:

Academic Skills Center (<http://asc.richmond.edu> or 289-8626) helps students assess their academic strengths and weaknesses; hone their academic skills through teaching effective test preparation, critical reading and thinking, information processing, concentration, and related techniques; work on specific subject areas (e.g., calculus, chemistry, accounting, etc.); and encourage campus and community involvement.

Career Development Center (<http://cdc.richmond.edu/> or 289-8547) can assist you in exploring your interests and abilities, choosing a major, connecting with internships and learning experiences, investigating graduate school options, and landing your first job. We encourage you to schedule an appointment with a career advisor.

Counseling and Psychological Services (<http://caps.richmond.edu> or 289-8119) assists students in meeting academic, personal, or emotional challenges. Services include assessment, short-term counseling and psychotherapy, crisis intervention and related services.

Speech Center (<http://speech.richmond.edu> or 289-6409): Assists with preparation and practice in the pursuit of excellence in public expression. Recording, playback, coaching and critique sessions offered by teams of student consultants trained to assist in developing ideas, arranging key points for more effective organization, improving style and delivery, and handling multimedia aids for individual and group presentations.

Writing Center (<http://writing.richmond.edu>): assists writers at all levels of experience. Students can schedule appointments with trained writing consultants who offer friendly critiques of written work.

Boatwright Library Research Librarians (<http://library.richmond.edu/help/ask.html> or 289-8669): assist students with identifying and locating the best resources for class assignments, research papers and other course projects. Librarians also assist students with questions about citing sources correctly. Students can schedule a personal research appointment, meet with librarians at the library's main service desk, email, text or chat.