Instructor Information
Dr. Amy DiBattista 464 Nightingale Hall
a.dibattista@northeastern.edu (617) 373-5181
Office Hours: Mon. and Thurs., 10:30 – 11:30 a.m., Wed. 3:00 – 4:00 p.m.

Teaching Assistant (TA) Information
Nicole Betz 435 Nightingale Hall
betz.n@husky.neu.edu (617) 373-3077
Office hours by appointment

Course Information
Class Meetings: Friday, 11:45 a.m. – 3:15 p.m.
274 Nightingale Hall

Prerequisites: Statistics in Psychological Research
Cognition or Psychology of Language
Junior or Senior standing

Required Readings: Course packet (available at campus bookstore or at NU Reprographics)
Additional readings on reserve at Snell Library

Course Format and Procedures
This is an Area B laboratory course covering research and writing in psychology, with a focus on classic experiments in the study of cognition. The format is a combination of lecture, experiment participation, and writing-workshop meetings with the TA. In four cycles, you will participate in an experiment, then switch roles and become the researcher by learning the background literature and goals of the experiment, analyzing the data, and drawing conclusions. For each experiment, you will then write a research report in American Psychological Association (APA) style.

Expectations for Lecture Class Periods
• Attendance is mandatory. Almost all of the material that you will need to write your research reports will be delivered in class. If you are absent, you will miss this information. If you cannot avoid missing a class, you must discuss your absence with the instructor or TA, preferably beforehand.
• Arrive on time and be attentive and considerate during class.
• Please treat class time as a professional environment, and remember that every student has the right to listen and participate in class.
• Actively engage with the material during class time.
• Take notes, in whichever way you prefer.
Expectations for Experiment Class Periods
• Arrive on time for your scheduled experiment-running time. Experiment class periods are precisely scheduled, to ensure that every student can participate and to avoid running experiments in your free time.
• Follow the TA’s instructions to the letter. This is necessary for accurate data collection, and, ultimately, interesting experimental results.

Participation
• Participation will make long class periods more interesting and productive for everyone. We will be discussing advanced theoretical, statistical, and research ideas, and your comments and questions will help everyone to understand the material.
• The class is small enough that participation may become full class discussions. Organized, focused class discussions are encouraged, particularly when discussing background literature and experimental results. Please question, agree with, and disagree openly with each other and with me, in a professional and respectful manner.

Responsibilities
• All students are individually responsible for the material covered in lectures, for their own experimental participation, and for their own assignments.
• In the event of an absence, obtain notes and announcements from a classmate. I will not recap entire lectures, although the TA and I will help you to understand missed material during office hours or individual meetings.

Notes Exchange
• You may participate in a notes exchange program with your classmates, on a strictly voluntary basis. A notes partner will be assigned to you after the first class period, with your permission. Details will be given in class.

Blackboard
• Lecture slides, documents, homework assignments, and other printed materials referenced in class will be saved as electronic copies on Blackboard.
• Lecture slides will be brief and attendance will be necessary to do well in the course.

Course Description (from Course Catalog)
This course...
• provides students the opportunity to acquire firsthand experience in conducting research on issues in human cognition;
• focuses on experiments and their implications for broader issues of cognitive functioning;
• and involves students in all aspects of each experiment, including collecting and analyzing data and preparing lab reports.

Course Objectives and Learning Outcomes
In this course, you will develop the following skills. By the end, you should be able to...
• critically read psychological science articles and follow each article’s scientific “story”;
PSYC 4612: Laboratory in Cognition  
Fall 2016

• understand experimental design in psychology, the requirements for good experimental methods, and how experiments and their data measure cognitive performance;
• analyze data and draw conclusions from those data concerning underlying cognitive processes;
• and communicate research findings clearly and logically in a research report in APA format.

Course Policies
This course strictly follows the College of Science Academic Course Policies, which is available at http://www.northeastern.edu/cos/wp-content/uploads/2014/11/Northeastern-COS-Policies-Template.pdf. In addition to these policies, please adhere to the following:

• In-class assessments must be completed during their scheduled class periods. Written assignments must be completed by their scheduled due dates and times. There are no exceptions. In the event of a medical or family emergency, please contact me.
• During class periods and other meetings, please silence the alerts on all electronic devices, or set them to vibrate. During class periods, you are encouraged to take notes in the way that works best for you (including on your computer, tablet, etc.), but if anything you bring to class proves to be a distraction that interrupts the class, you will be asked to put it away.
• Please contact the TA and instructor by email. We will typically respond within one day (and usually even more quickly than that) on weekdays, but expect delays in responding after 5 p.m. on weekdays, on weekends, and on university holidays.

Evaluation
Your final grade in this course will be calculated based on four research papers, experiment participation, writing workshop participation, and one quiz.

Research Papers
You will write a research report for each of the four experiments, in the form of a journal article in APA format. (APA style will be discussed in class and in the Rosnow and Rosnow text.) You will have the option to rewrite the first three reports; and the final grade for each of the first three reports will be the higher or the original and the rewrite (usually the rewrite). The fourth report cannot be rewritten.

Research papers are graded on a 100-point scale. Late papers will be penalized three points per day.

Please bring hard copies of your papers to class with you, rather than delivering them via email, unless otherwise specified.

Please note: You are encouraged to discuss the material with your classmates, but you must write your report on your own and in your own words. The class is small enough that plagiarism will be obvious.
**Writing Workshops**
You are required to meet with the TA before rewriting each of the first three research reports. The TA will help to clarify which parts of the report are done well and which parts need to be improved.

**Experiments**
You are required to participate in four classic cognitive psychology experiments, conducted during class meeting times. Your participation is critical, to experience cognition experiments and to generate the data that we will analyze and report. When data are missing, experiments are less likely to show clear and interesting results.

**Quiz**
There will be one quiz at the beginning of the semester, covering components of research design and experimentation.

**Grading**

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Research Report 1</td>
<td>10%</td>
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<tr>
<td>Research Report 2</td>
<td>20%</td>
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<tr>
<td>Research Report 3</td>
<td>25%</td>
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<tr>
<td>Research Report 4</td>
<td>30%</td>
</tr>
<tr>
<td>Quiz</td>
<td>8%</td>
</tr>
<tr>
<td>Writing Workshop Attendance</td>
<td>3%</td>
</tr>
<tr>
<td>Experiment Attendance</td>
<td>4%</td>
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</tbody>
</table>

Ranges for final grades:

- A: 93-100
- B-: 80-82.99
- D+: 67-69.99
- A-: 90-92.99
- C+: 77-79.99
- D: 63-66.99
- B+: 87-89.99
- C: 73-76.99
- D-: 60-62.99
- B: 83-86.99
- C-: 70-72.99
- F: 59.99 & below

**Academic Integrity**
This course strictly follows the University’s policy on academic honesty and integrity (attached). Please take a look at it, even if you have read it before. It is worth the review, as certain aspects of “common sense” honesty and integrity are operationalized there.
Northeastern University Academic Integrity Policy

http://www.northeastern.edu/osccr/academic-integrity-policy/

The Policy

A commitment to the principles of academic integrity is essential to the mission of Northeastern University. The promotion of independent and original scholarship ensures that students derive the most from their educational experience and their pursuit of knowledge. Academic dishonesty violates the most fundamental values of an intellectual community and undermines the achievements of the entire University.

As members of the academic community, students must become familiar with their rights and responsibilities. In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, examinations of whatever kind, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Students are responsible for learning the conventions of documentation and acknowledgment of sources in their fields. Northeastern University expects students to complete all examinations, tests, papers, creative projects, and assignments of any kind according to the highest ethical standards, as set forth either explicitly or implicitly in this Code or by the direction of instructors.

The following is a broad overview, but not an all-encompassing definition, of what constitutes a violation of academic integrity.

Cheating

The University defines cheating as using or attempting to use unauthorized materials, information, or study aids in any academic exercise. When completing any academic assignment, a student shall rely on his or her own mastery of the subject.

Examples include, but are not limited to

- Unauthorized use of aids such as but not limited to notes, text, the Internet, cell phones, etc. to complete any academic assignment.
- Copying from another student’s academic work.
- Unauthorized communication during an examination.
- Handing in the same paper for more than one course without explicit permission from the instructor(s).
- Intentionally viewing a test before it is administered.
- Storing notes in a portable electronic device for use during an examination.

Fabrication

The University defines fabrication as falsification, misrepresentation, or invention of any information, data, or citation in an academic exercise.

Examples include, but are not limited to

- Inventing data, facts, or sources for an academic assignment.
- Altering the results of a lab experiment or survey.
- Citing a source in a bibliography that was not used.
- Stating an opinion as a scientifically proven fact.
Plagiarism
The University defines plagiarism as using as one’s own the words, ideas, data, code, or other original academic material of another without providing proper citation or attribution. Plagiarism can apply to any assignment, either final or drafted copies, and it can occur either accidentally or deliberately. Claiming that one has “forgotten” to document ideas or material taken from another source does not exempt one from plagiarizing.

The following sources require citation
• Word-for-word quotations from a source, including another student’s work.
• Paraphrasing (using the ideas of others in your own words).
• Unusual or controversial facts not widely recognized.
• Audio, video, digital, or live exchanges of ideas, dialogue, or information.
• Students unclear as to whether or not a source requires citation should speak with their professor or consult the Writing Center in 412 Holmes Hall.

Unauthorized Collaboration
The University defines unauthorized collaboration as instances when students submit individual academic works that are substantially similar to one another. While several students may have the same source material, any analysis, interpretation, or reporting of data required by an assignment must be each individual’s independent work unless the instructor has explicitly granted permission for group work.

Examples include, but are not limited to
• Submitting work that closely matches that of another student, even when the work is to be original to the student handing in the assignment.
• Sharing a take-home examination, case write-up, lab report, or any other assignment with a peer without express permission from the instructor.

Participation in Academically Dishonest Activities
The University defines participation in academically dishonest activities as any action taken by a student with the intention of gaining an unfair advantage over other students.

Examples include, but are not limited to
• Misrepresenting oneself or one’s circumstances to an instructor.
• Stealing an examination.
• Purchasing a pre-written paper.
• Selling, loaning, or otherwise distributing materials intended for the purpose of cheating, plagiarism, or other academically dishonest acts.
• Destroying, altering, stealing, or forging another student’s work, library materials, laboratory materials, academic records, course syllabi, or examination/course grades.
• Intentionally missing an examination or assignment deadline to gain an unfair advantage.
• Forging information or signatures on official University documents.

Facilitating Academic Dishonesty
The University defines facilitating academic dishonesty as intentionally or knowingly helping or contributing to the violation of any provision of this policy.
Examples include, but are not limited to

- Doing academic work for another student.
- Making available previously used academic work for another individual who intends to resubmit the work for credit.

Obligation to Uphold Academic Integrity

All members of the Northeastern University community have a role in upholding the Academic Integrity Policy. Any member of the community who witnesses a violation of this policy should report it to the appropriate faculty member or the Office of Student Conduct & Conflict Resolution (OSCCR). All instructors are required to refer to Northeastern’s Academic Integrity Policy in their course syllabi.

Options for Instructors Reporting Alleged Violations of the Academic Integrity Policy

A faculty member who suspects a student in his or her class, or working under his or her direction, of violating the Academic Integrity Policy can choose to:

- File official charges with the OSCCR, or
- Submit the complaint as an “information only” case to request that the incident be kept “on file” for the student.

An instructor who believes that a student made an unintentional mistake and who does not want to file an official complaint may submit an “information only” complaint. The faculty member will speak with the student suspected of violating the policy before sending forward a complaint. OSCCR will inform the student via e-mail when it receives an “information only” complaint. This correspondence will provide the student with resources to avoid potential future violations as well as notice that another “information only” complaint for an Academic Integrity violation may result in an official charge and meeting with a member of the OSCCR staff. When an “information only” complaint is received by OSCCR for a student who already has one or more “information only” complaints on file, OSCCR reserves the right to determine whether there are sufficient facts in the new complaint to support a charge of an Academic Integrity violation. The Director of OSCCR will review all complaints submitted against a student to determine whether sufficient evidence for a violation of the Academic Integrity Policy exists. If the Director determines that the evidence is sufficient, the case will be assigned to a staff member within the OSCCR. The staff member will assign the case to an Administrative Hearing or to the Student Conduct Board as appropriate.

Sanctions

Hearing Officers and the Student Conduct Board have discretion to impose sanctions for a Responsible finding of an Academic Integrity violation that range in severity from a written warning to expulsion and include an action taken by the student to help rebuild trust within the community.

Hearing officers will take the following into consideration when determining appropriate sanctions for violations of the Academic Integrity policy.

- Nature of the violation(s)
- Severity of the damage, injury, or harm resulting therefrom
- Student’s past disciplinary record
- Mitigating circumstances
- Aggravating circumstances
Appeals
Students may appeal the disciplinary actions of an Academic Integrity violation on the three grounds identified in the Code of Student Conduct. The Appeals Process outlined in the Code of Student Conduct will be used for such appeals. Please refer to the Code of Student Conduct for a complete description and explanation of the Appeals Process.

Grading Authority
OSCCR does not have authority over assignment or course grades. Therefore, a student who violates Northeastern University’s Academic Integrity Policy may also be subject to academic penalties at the discretion of the instructor in the course. This can result in, but is not restricted to, the student failing the course. A student with questions about the Academic Appeals process should contact the academic advisor to review that process.
## Course Calendar

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<tr>
<th>DATE</th>
<th>TOPIC/ACTIVITY</th>
<th>READING ASSIGNMENT</th>
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| 9/9   | Course mechanics and overview  
Begin research design lecture  
Run in Experiment 1 (Natural Concepts) | —                                                                                                           |
| 9/16  | Conclude research design lecture  
Experiment 1 background and analysis | Sheridan: Ch. 1, *Experimental Psychology…*  
Sheridan: Ch. 3, *Measurement and…*  
Levy & Ransdell: *Natural Concepts*  
Snodgrass et al.: *Semantic Memory*  
Smith & Medin: *The Classical View*  
Reed: *Categorization* (on reserve) |
| 9/23  | Quiz  
Experiment 1 results and discussion | APA Style handout  
Rosnow & Rosnow: Ch. 1, 4, 6, 7, 8,  
Appx. A  
Rosch & Mervis: *Family Resemblances…* |
| 9/30  | Run in Experiment 2 (Working Memory)  
**RR1 due in class** | —                                                                                                           |
| 10/7  | Experiment 2 background and analysis  
Return and discuss RR1  
Schedule RR1 Workshop times | Levy & Ransdell: *Retrieval from WM*  
Snodgrass et al.: *Mental Chronometry*  
Sternberg: *High-Speed Scanning…* |
| 10/14 | Experiment 2 results and discussion  
**RR1 Rewrite due in class** | —                                                                                                           |
| 10/21 | Run Experiment 3 (Feature Detection)  
**RR2 due in class** | —                                                                                                           |
| 10/28 | Experiment 3 background and analysis  
Return and discuss RR2  
Schedule RR2 Workshop times | Levy & Ransdell: *Feature Detection*  
Reed: *Pattern Recognition* (on reserve)  
Neisser: *Pattern Recognition* (on reserve) |
| 11/4  | Experiment 3 results and discussion  
**RR2 Rewrite due in class** | —                                                                                                           |
| 11/11 | Veterans’ Day: NO CLASSES  
**RR3 due via email any time today** | —                                                                                                           |
| 11/18 | Run Experiment 4 (Long-Term Memory)  
Return RR3  
Schedule RR3 Workshop times | —                                                                                                           |
| 11/25 | Thanksgiving Recess: NO CLASSES | —                                                                                                           |
**Course Calendar, continued…**

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<thead>
<tr>
<th>DATE</th>
<th>TOPIC/ACTIVITY</th>
<th>READING ASSIGNMENT</th>
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<tbody>
<tr>
<td>12/2</td>
<td>Experiment 4 background, analysis, results and discussion</td>
<td>Levy &amp; Ransdell <em>Activation of LTM</em></td>
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<td>Anderson: <em>Human Memory</em></td>
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<td>Meyer &amp; Schvaneveldt: <em>Facilitation in</em></td>
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<td></td>
<td><strong>RR3 Rewrite due in class</strong></td>
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<tr>
<td>12/7</td>
<td>LAST DAY OF FALL CLASSES</td>
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<tr>
<td>12/8</td>
<td>READING DAY</td>
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<tr>
<td>12/9–</td>
<td>FINALS WEEK</td>
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<tr>
<td>12/16</td>
<td><strong>RR4 due Wed., 12/14, 4:00 p.m.</strong></td>
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<td>(Drop it off in the Psychology Office.)</td>
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