

**Psychological Processes in Reading**  
**Psychology 308**  
**Fall, 2011**  
**Monday/Wednesday/Friday 1:30-2:20**

Instructor: Professor D. Besner

Office: PAS 4034

If you want to set up a meeting or ask questions outside of class, then I welcome you e-mailing me ([dbesner@uwaterloo.ca](mailto:dbesner@uwaterloo.ca)) or coming to my office (I'm happy to see students in my office at most times, or, failing that, to set up a time to meet). You can always email me with questions, including most nights and weekends; I try and answer all questions within several hours. Please do not email me the night before a quiz.

T.A: Shannon O'Malley

office: PAS 4011

e-mail: [somalley@uwaterloo.ca](mailto:somalley@uwaterloo.ca)

office hours: Wednesday 2:30-3:30

Class Meet Times: 1:30-2:20 Monday/Wednesday/Friday

Location: PAS 2083

### **Course Objectives**

The objective of this course is to introduce the student to some of the literature on basic processes in reading, with an exclusive concentration on visual word recognition because “reading” doesn't happen without it, and because “comprehension” is not specific to reading (one also understands spoken language; indeed reading comprehension and understanding speech are highly correlated). Suffice it to say that there are about 2 million Canadians who can't “read” because they cannot decode print (but they do understand speech).

We will consider a variety of theoretical possibilities as to how visual word recognition might unfold over time, stated in verbal form. We then turn to a consideration of various acquired dyslexia's (people who were literate, but who now have problems reading because of acquired brain damage (usually a stroke or tumour—but driving your car into a tree at high speed may also leave one dyslexic). We will also consider a wide range of experimental results from studies of intact university level readers, and examine how these results inform various theoretical perspectives. Much will be said about such topics as “attention”, “automaticity”, and “mental set” insofar as they relate to visual word recognition. A good deal will also be said about a number of computational accounts (models implemented on a computer that take print as an input and produce an output that corresponds to speech) that attempt to simulate visual word recognition in both intact readers and those with an acquired dyslexia.

**There is no book for the course.** Instead, I will give you, in a series of lectures, my views on what has happened in this rather large literature over the last 30 years or so. A rather more detailed reading

list which consists of primary references and some chapters will also be provided. These materials are referenced for your interest and edification. If you know and understand the material presented in class that will be sufficient (which means that not attending class is likely to hurt your performance).

I don't much favour lecture courses, particularly for material such as this which requires a fair bit of sustained concentration. However, the class is usually too large to run as a seminar. What this means is that this course works best when students **ask questions** when they aren't understanding something (trust me, if you think you don't understand something it is bound to be the case that 50% of the class holds the same opinion as you). I frequently ask students, in class, what they think about material that is being presented (e.g., in terms of the soundness of an argument, soundness of an experimental design, etc)..

### **Grading Scheme**

**Your grade in the course is based entirely on a series of weekly quizzes, of which I will take the average of the best 10.**

There will be a short multiple choice quiz (approximately 20 questions) every Friday when there is a class. This quiz is given at the beginning of the lecture, starting the second week of class. ***There are no make-ups for missed quizzes.*** These quizzes will typically (but not always) cover the prior two lectures. These weekly quizzes take place because the research indicates that this is a good way to learn.

I will be away at a conference (November 4). There will be no class during that time. Nor will there be a class on October 10 (Thanksgiving).

**Academic Offences "Note on avoidance of academic offenses: All students registered in the courses of the Faculty of Arts are expected to know what constitutes an academic offense, to avoid committing academic offenses, and to take responsibility for their academic actions. When the commission of an offense is established, disciplinary penalties will be imposed in accord with Policy #71 (Student Academic Discipline). For information on categories of offenses and types of penalties, students are directed to consult the summary of Policy #71 (Student Academic Discipline) which is supplied in the Undergraduate Calendar (p.1:11). If you need help in learning how to avoid offenses such as plagiarism, cheating, and double submission, or if you need clarification of aspects of the discipline policy, ask your course instructor for guidance. Other resources regarding the discipline policy are your academic advisor and the Undergraduate Associate Dean."**

### **Participation in Psychology Research: Guidelines for Psychology 308, Fall 2008**

Experiential learning is considered an integral part of the undergraduate program in Psychology. Participation in research is one example of this. A number of undergraduate courses have been expanded to include opportunities for Psychology students to volunteer as research participants enabling them to learn first-hand about psychology research and related concepts. Many students report that participation in research is both an educational and interesting experience.

Student participants may earn up to 4 percentage points towards their final mark in Psychology 308 by participating in Cognition or Behavioral Neuroscience Psychology studies conducted by students and faculty in the Department of Psychology. Participation is worth .5 participation credits (percentage points) for each half hour session. Researchers will record student's participation and will advise the course instructor of the total points earned by each student at the end of the term. Students who do not wish to participate in research may choose an alternative approach to earning the same number of points; this is explained below in "Alternative to participating in research".

Please note that all Psychology studies have undergone prior ethics review and clearance through the Office of Research Ethics.

#### Educational focus of participation in research

To maximize the educational benefits of participating in research, students will receive feedback information following their participation in each study detailing the following elements:

- Purpose or objectives of the study
- Dependent and independent variables
- Expected results
- References for at least two related research articles
- Provisions to ensure confidentiality of data
- Contact information of the researcher should the student have further questions about the study
- Contact information for the Director of the Office of Research Ethics should the student wish to learn more about the general ethical issues surrounding research with human participants, or specific questions or concerns about the study in which sh/he participated.

#### ***How do I sign up?***

Once you are registered in the course, you will get an account on SONA (our web-based Study Sign-Up system) at <http://uwaterloo.sona-systems.com>. User ID is your Quest ID (eg. j2smith), temporary password is your Student ID (eg 2001234). Log in to your account, read/acknowledge the ORE "Human Subjects/Privacy Policy" then complete a very brief (10 minute) "Prescreen" questionnaire to provide basic demographic info. You won't receive a credit for this and you may decline if you wish however \*completing it will increase your eligibility for other studies\*. Once you have completed (or declined) the Prescreen questionnaire you should go to "My Profile" and enter your preferred (Alternate) email address. Then you can go to "Study Sign-Up" and select a Psych 308-eligible study that interests you and a day/time that fits your schedule. You'll receive a confirmation email and a reminder the day before the study. Upon completion of the study you are granted your Study Credit and given feedback about the study hypothesis, design and predictions.

#### ***When should I sign up?***

Right away, the sooner the better!!! The On-line study "Mass Testing Survey F08" (one full credit) will only be offered for a few weeks and you \*should do this study as soon as possible\*. Researchers often select participants based on their responses and doing this survey increases your eligibility for other studies. Note that you can only do this survey if you have completed the Prescreen questionnaire. Doing both Prescreen and Mass Testing Survey helps you (by providing more qualifying studies and it helps researchers (by identifying more qualified participants) so we would greatly appreciate it if you would do both.

#### ***Are there any restrictions to the studies I can sign up for?***

Yes ... i) the study must be eligible for a credit in this class (as noted in the study description) ii) only 2 of your 4 credits can be for On-line studies and iii) you should try to spread your participation out over the term. The last day to participate for credit is December 1 but you can participate for pay until December 19.

#### ***Where can I get more information, instructions, help with login problems etc?***

REG website: <http://www.arts.uwaterloo.ca/~regadmin/regparticipant>  
 REG Coordinator: [regadmin@watarts.uwaterloo.ca](mailto:regadmin@watarts.uwaterloo.ca)

### Alternative to participating in research

Students are not required to participate in research, and not all students wish to do so. As an alternative to participation in research, students may submit short reviews (1½ to 2 pages) of journal articles relevant to the course material. Each review article counts as one percentage point. You should contact your TA to get approval before writing the review. To receive credit, you must follow specific guidelines. The review must:

- **Be submitted before November 24. Late submissions will NOT be accepted under ANY circumstances.**
- Be typed
- Fully identify the title, author(s), source and date of the article. A copy of the article must be attached.
- Identify the psychological concepts in the article. Critically evaluate the application or treatment of those concepts in the article. If inappropriate or incorrect, identify the error and its implications for the validity of the article. You may find, for example, misleading headings, faulty research procedures, alternative explanations that are ignored, failures to distinguish factual findings from opinions, faulty statements of cause-effect relations, errors in reasoning, etc. Provide examples whenever possible.
- Clearly evaluate the application or treatment of those concepts in the article.
- Keep a copy of your review in the unlikely event we misplace the original.

Students may complete any combination of a) participation in research or b) article review up to a total of 4% points.