Credit Points for Research Participation

The Department of Psychology & Neuroscience believes that participation in research provides undergraduate students with an important educational experience. To encourage students who often aren't able to recognize this value immediately to acquire this experience, they may earn up to three credit points in their respective classes by participating in research studies either as participants or as observers. The educational advantages accorded by research experience are outlined below:

Departmental members use an enormous variety of procedures and devices to investigate behaviour. These devices range from relatively simple questionnaires to sophisticated brain imaging procedures. Direct experience brings life to what is only described in textbooks and enhances learning. Our policy of encouraging students to participate in research projects provides them with an opportunity to experience directly how a wide variety of techniques and equipment are used in research settings. We view this as an important tool in familiarizing our undergraduate students with techniques and equipment used in modern psychology. In addition, each different project can serve to provide students with a direct and practical educational tutorial on the intricacies of logical thinking, and the niceties of design and control procedures that underlie scientific research.

Research participation enhances our undergraduates’ understanding of ethical issues associated with human research such as those outlined in the Tri-Council Policy Statement, and the Canadian Psychological Association Code of Ethics. For example, in both lectures and their texts, the significance of key ethical principles such as informed consent and debriefing is emphasized. Research participation provides students with an opportunity to experience directly how these principles are applied in actual research settings. An understanding of ethical principles associated with human research is important, not only for students who may choose to go on in psychology, but also for the more general student population. Many of our students enter business and professional careers and it is extremely valuable for them to have a practical understanding of ethical principles that apply in the gathering and dissemination of information about people.

Research participation also serves to familiarize undergraduate students with faculty, graduate students, and the various research programs being carried out within the department. This arrangement is especially helpful to students moving into our major and honours program. Their experience in participating in various laboratory research projects provides them with background information that can help guide them in determining the kinds of problems they elect to focus on and explore during their undergraduate career, and it facilitates the selection of advisors for independent research projects, or theses. The experience also frequently serves to influence course selection. Students often find certain types of studies intriguing and are inspired to take courses relevant to this type of research.
Overview of Research Participation and Recruitment

Students may elect to participate in research in three different ways:

1) They may contact researchers directly in response to information made available through psychology courses or the participant pool website (SONA).
2) They may accept an invitation to participate if contacted by a researcher through SONA.
3) They may respond to posted public advertisements.

Details of these options follow:

Option 1. Students may volunteer to participate in research projects for course credit as observers or participants in some, though not all, courses in psychology and neuroscience. Students are informed of research participation conditions on course handouts distributed at the start of each term. Students wishing to volunteer to participate in research projects may make contact with researchers in one of the following ways:

Most commonly, students review research projects on the departmental participant pool website and make an appointment to participate in projects that interest them.

Sign-up sheets may be posted where students can read an outline of research projects.

Option 2. Researchers may contact students and invite them to participate.

Researchers in the department may use information obtained from a student database that is assembled at the start of each academic year (see last section of this document). The database enables researchers to identify students who demonstrate behavioural profiles that make them eligible for participation in particular studies. Information in the database is provided by students who volunteer to fill out questionnaires during the first meeting of introductory psychology classes, and who express an interest in volunteering for research projects.

Research will be conducted or supervised by a faculty member or graduate student. At times, senior undergraduates may draw a collection of potential participants from the database for thesis research but they are not given access to the unencoded contents of individually identifiable questionnaires.

Researchers identify particular students of interest and contact them by telephone or email to see if they are interested in participating in a particular research project.

Option 3. Public posting of advertisement

Researchers may utilize general advertisements in media, newsletters and public bulletin boards to invite participation in research.
Common principles employed in all recruitment practices:

All Faculty level research or graduate thesis research using any of the above three options for recruitment must receive REB approval prior to their commencement.

All graduate pedagogical projects that are not thesis research and pedagogical undergraduate research may be reviewed and approved by the Psychology & Neuroscience Department Ethics Committee or taken to a University level REB. In addition, undergraduate theses are sent to the REB for an expedited review after departmental approval.

At the start of each research session, participants read an informed consent form. Any questions they have are answered by researchers, and they sign the informed consent form to indicate that they understand what is required, and they agree to proceed. At this point they elect to participate as observers or full participants. Those who choose to participate as observers must be assured that their data will not be retained. Other than preservation of data, the research experience of observers and research participants is identical.

Finally, as detailed later, students receive a debriefing.

Guidelines for the Use of the Participant Pool

Class instructors decide whether or not they want to allow their students to participate in the participant pool, except for introductory courses where it is mandatory in order to have a base participant pool size. Participation by students in the participant pool is also voluntary. In fact, students must explicitly enroll themselves. They are not automatically enrolled by virtue of being in a participating psychology class. Students may decline to participate without prejudice to their academic progress. Students may exercise their right to decline by simply failing to enroll.

Researchers may participate in the participant pool by posting experiments to the participant pool. Participation by researchers in the participant pool (as an experimental study) is also voluntary. However, it is only open to members and affiliated members of the Department of Psychology & Neuroscience. Because the participant pool is a subset of the general adult population, any research protocol that has been approved for sampling from the typical adult population automatically has approval to use the participant pool. The informed consent approved for that research is valid for the participant pool. The recruitment material might need minor modifications for presentation on the participant pool website. Hence, in principle, all researchers who have an ethically approved project that is directed at the typical, adult, human population have access to the participant pool. However, access to the participant pool is an earned privilege, not an inalienable right. That right can be removed if the privilege is abused.
The participant pool must be managed carefully if the department is to maintain the privilege. The University Research Ethics Board has the authority to terminate the participant pool if it believes that it is not managed properly. The term “managed carefully” means that the rights, dignity, privacy, and autonomy of students must be respected at all times. In ethically ambiguous situations, the department must err on the side of the participants.

Because the potential participants are also potentially students of the particular researchers, there are additional ethical concerns that are not the norm for community-based samples. It is important that students feel that they have free choice to participate. It is also important that students feel that the administration of the participant pool is fair (that credit points are reasonable compensation for effort involved). Finally, it is also important that students feel that they will not be affected in a negative manner if they should decline to be a participant. To attain this state, there are several important guidelines, all of which must be consistent with the guidelines of the most recent TCPS.

**The Participant Pool**

When in operation, the participant pool is a website. The researcher posts an experiment with a fair amount of detail. For the student, this website lists a large number of experiments by name (title) in a unique random order for each logon session. Students browse the list of experiments and select those that are of interest. When selected, students are presented with a more elaborate description of the experiment (this is the approved recruitment material). If the student is still interested, the student can proceed to sign up for the experiment. Usually signing up consists of selecting one of the available time slots that the researcher has made available. That is, the researcher lists the experiment and a number of potential time slots. Hence, all aspects of recruitment are handled by the participant pool website.

In addition, the participant pool maintains a running tally of the participation of the student. That is, it tracks the credit points so that researchers need not worry about this detail. Once a student has signed up for an experiment, the participant pool will automatically grant the appropriate amount of credit unless the researcher intervenes to change that (e.g., if a student should cancel at the last minute, or if the number of points needs to increase to compensate for delays such as equipment failure).

There may be complications to this basic scheme for some experiments. In particular, studies may require multiple sessions; or studies may consist of an online survey that does not have a particular scheduled time (there is a way to work around this). Participation in a particular study may lead to exclusions from other studies. Participation in particular studies may have specific selection criteria that exclude most students (there is the provision for a pretest).

The participant pool operates at arms-length from class instructors. Ideally, instructors who grant credit points are not involved in the day-to-day maintenance of the participant pool (this depends to some degree on faculty availability). The day-to-day maintenance is
conducted by the department main office, though instructors may monitor participation. Instructors only receive a listing of participation (credit points) at the end of the term.

**Credit Points**

Credit points are awarded for participation in experiments. Typically, points are awarded as 0.5 credit points per 0.5 hours of participation, or part thereof. That participation includes the informed consent and debriefing, but it does not include the time to meet the participant. Hence, most experiments conducted in a lab will award at least a full credit point.

As a general rule, online surveys that can be completed at the time and place of the participant’s convenience, and without the full in lab experience and interactive debriefing, are only granted 0.5 credit points regardless of the length of an online session. (NB: 0.5 pts per session in multi-session or longitudinal studies). This limitation is intended to ensure equitable involvement and effort by participants in online and lab-based studies.

Credit points must be awarded even if the participant does not complete the session. That is, if the participant shows up for the appointment (and reads the informed consent), then the student will receive the credit points allocated to that session. Participants must feel that they have the right to terminate any session without prejudice to pre-existing entitlements (i.e., expected points). This is intended to ensure that participants really do feel free to quit whenever they wish.

Students may earn credit points either as observers or participants. After reading the informed consent form, a student elects to enlist as either an observer or as a research participant. The treatment he or she receives, and the educational experience accorded, is identical regardless of the choice made. The only difference is that if a student chooses to volunteer to serve as a research participant, their data are retained, and if a student chooses to volunteer as an observer, their data are not. A student can terminate participation at any point without loss of credit points (whether participating as an observer or participant).

NB: Because of the observer clause it is not permitted to exclude students for the sake of sample homogeneity. If the student could have come and participated as an observer then they can't be excluded from the outset as a participant. This may result in having to let students participate who cannot contribute to your final data analysis.

That doesn't mean that exclusions are verboten. Any exclusion that's a requirement of the study such as an apparatus that only works with one hand, or an invasive eye monitor, or EEG, or fMRI most definitely will have exclusions where some students could not even go through the study with observer status. Those exclusions need to be there on the participant pool website.
Credit points may be denied if the participant does not show up for a session or if a participant cancels immediately prior to a session (i.e., before reading the informed consent). A participant cannot reasonably claim that they do not want to participate if they have not read the description of the study. There should be some genuine effort on the part of the participant. The participant pool is not intended to promote a form of academic dishonesty.

Points may be offered for an alternative activity to research participation at the discretion of instructors. This has commonly been the case in the introductory course. Instructors are encouraged to do this in order to reduce any potential coercive nature of the credit point system toward participating in research. The options are typically things like writing a brief report about a paper. When such alternatives are provided the grade or quality of work cannot determine whether points are awarded, just as in research participation. The only determining factor is that a good faith effort was put forth. And, of course, pursuant to that, instructors need only assess that effort and do not need to grade such reports.

**Multiple Sessions**
Credit points in a multi-session study should be awarded per session, at the end of each session. It is permissible to add a bonus for completion of all studies, but that bonus cannot be excessive.

**Money**
It is permissible to offer money in lieu of, or in addition to, credit points. This would be applicable to a multi-session study that requires more time than the available points would cover. This would also apply to a long single session study (e.g., four hours). This would also apply to those students who have already earned some points and only need part of what a study offers.

**Duration**
Credit points may only be applied to courses in the term (not year) that they are earned. Credit points do not carry over from one term to the next. Students may not bank credit points, and researchers may not advise or encourage students in this direction.

**Educational Issues**
To enhance the educational process (the training of potential researchers), all studies that use the participant pool must provide debriefing, even if there is full informed consent. Note that the TCPS holds the debriefing is not required if there is full informed consent, simply because there is nothing to debrief.

It is advocated that researchers use the debriefing to instill some knowledge and to generate some interest, imagination, or enthusiasm for the topic. If a student does not want to engage in this activity, under the guidelines of the TCPS, they cannot be forced to engage. However, most students are interested in the studies that they complete because they are in psychology and neuroscience and because they have specifically chosen that particular study. Hence, most want to discuss the research.
The debriefing must stay the same whether the student volunteering as a full participant or as an observer. The only distinction between those two is that for the observer no data is retained after they complete their session.

**Ethical Issues**

The participant pool is a subset of the general adult population. As such, one can/should assume that the participants are capable of making informed decisions. However, because the power structure implicit within any educational institution, there are several issues. These issues are focused on the use of students as participants. That is, the issues are not specifically confined to the participant pool, but since most student participation is through the participant pool, the issues are of some relevance.

Firstly, there cannot be any coercion on the part of instructors. In fact, there cannot be any perception of coercion, even if that perception is in error. All studies must exist at a clearly defined arms-length from the class and instructor. Any perception of coercion must be eliminated. To achieve this goal, the participant pool is maintained at arms-length from any one class. The initial contact for most students with the participant pool is through the anonymity of the web (including email), or through the departmental main office.

Secondly, the involvement of undergraduates (and to a lesser extent graduate students) in research can create unique problems. Undergraduate students may not have sufficient maturity to properly handle the information (particularly sensitive information) that they acquire about their peers. Furthermore, these undergraduate may have, or may form, a personal relationship with the participants. If the reader of this document is an undergraduate (or graduate) student, please note that this is not intended as an insult on all undergraduates. Since undergraduates are still early in their careers, this is (logically) more of a concern. This must be monitored carefully and dealt with on a case by case basis. Any undergraduate who fails to show proper respect for their participants (peers) will be barred from the use of the participant pool regardless of the status of the academic program (i.e., it will not matter if the student researcher is only half-way through an honours thesis).

Thirdly, there will be no in-class recruitment of participants for any study (regardless of whether or not the students participate in the participant pool). In particular, instructors must not promote their own studies in classes. More generally, instructors must not promote any specific study in classes. The participant pool is the only academically linked tool for recruitment. Instructors may promote the participant pool in general. In addition, instructors may not permit any other researchers to directly advertise a particular study within the context of the academic program. This includes formal and informal in-class recruitment as well as the posting of advertisements in classrooms or electronically (e.g., on Brightspace). All studies must recruit student participants through the (relatively anonymous) online participant pool (or though external means). This helps to maintain an arms-length relationship between instructors and researchers, and between what is academic and what is research. It helps to maintain the distinction for students.
The compensation of credit points and money cannot be excessive. This is undue coercion. Instructors cannot tell students to participate in research if they want to raise their grades. This is a particular concern for students who straddle a letter boundary. The instructor should discuss grades of the student without reference to the participant pool.

The value of a credit point is set to be approximately equivalent to the same amount of time devoted to studying. That is, an hour of studying should net about 1 grade point and an hour of participation should net about 1 grade point. Hence, offering 20$ and a credit point for one hour of work would be excessive. This is also part of the reason that online surveys only net \( \frac{1}{2} \) a credit point regardless of length (there may be exceptions). Most surveys are short and can be completed in the comfort of one’s home, at the time of one’s choosing. This is not comparable to a study that requires a participant to travel to the university, to a lab for a particular scheduled time. More importantly, this is not equivalent to a study with in person interactive debriefing. The compensation should be as equivalent (in terms of effort) as possible across studies.

In multi-session studies, credit points should be granted at the end of each session. This is the typical operation of the participant pool so this should not be a problem. The University REB has this stipulation because granting all the compensation at the end of a multi-session study would create too much pressure to complete the all sessions. The participant would not feel free to terminate at any time.

**PreTest (Screening)**
The current participant pool provides the provision for a pretest. This pretest is a questionnaire that is designed to identify members of particular subpopulations (students) that represent only a small proportion of the student population. Students who meet specific criteria are then eligible for studies that are restricted to those subpopulations.

Students complete the pretest early in the term. Completion of the pretest is voluntary. In fact, completion of each and every question on the pretest is voluntary. If, upon completion, a student participant should be identified as eligible for a particular study, then the description of that particular study will be listed along with all of the other studies that the student is eligible for. The one extra study is not made salient or outstanding. Students who do not meet the eligibility requirements never see the study. That is, studies that have eligibility restrictions are simply invisible to students who do not meet the criteria.

The pretest must proceed through its own ethical review, which is, in many ways, more complicated than a standard protocol. Creation of the pretest is accomplished by a special subcommittee of the Departmental Ethics Committee.

**Cost**
The participant pool is not free. The department pays a yearly license/maintenance fee. This fee is quite modest and a cost analysis indicated that licensing would be more cost effective than trying to create and maintain an in-house system.
This cost is recovered from researchers who use the participant pool. For all principal investigators (i.e., faculty), there is a yearly cost that is about $100. This fee covers all of the post-docs, research associates and assistants, graduate students, and undergraduate students associated with that principal investigator. This fee allows unlimited access. There is no provision for a fee per use (i.e., per participant tested). It was tried but it was simply too unwieldy when accounts had to be settled.

For any reasonable number of participants (more than 5), this fee is a bargain. If one calculates the cost per participant without a participant pool then one arrives at a figure near $20. Without a subject pool, there is at least an hour associated with recruitment of each participant (i.e., in the initial contact and in the phone tag associated with scheduling). This is the RAs time at whatever the going rates are. In addition, there would be hours tied up in the tracking of credit points, and the submission of various forms to various instructors. Finally, there would be many hours devoted to the creation and placement of recruitment materials (e.g., posters).

Anyone who wants to use the participant pool must pay, or be a part of a lab that has already paid (or agreed to pay). This is a legitimate expense for most research grants.

**Management of the Research Participant Database**

Prior to the academic year a submission will be filed informing the relevant REB of the intent to set up a database. The submission will list researchers who will be responsible for the management of the database, and provide copies of the prescreen questions that the researchers propose to use. Also, included will be copies of the informed consent form, an outline of debriefing procedures, and information about the access, security, and storage location arrangements to be employed.

Then, once the application is approved by the REB and at the beginning of the academic year, students in psychology and neuroscience classes are provided with information about the opportunity to participate in research projects. They are informed that participation in some research projects is dependent upon information they provide in the screening process. Students are invited to complete the prescreen on SONA, the department’s experiment management system for online research study participation, if they wish to be considered as participants in such research projects. The selection of prescreen questions used is based on the anticipated needs of researchers (faculty and graduate students) who wish to conduct research on specific groups of individuals identified through the screening process.

Students are informed that any project in which they may be invited to participate will have been approved by the appropriate Dalhousie Research Ethics Board. They are also assured that detailed information will be provided about individual research projects if they are contacted by a researcher about participation in a project. And, they receive one credit point for completion of the prescreen.
Students can search SONA for research projects. They must meet the eligibility requirements for the project in order to participate and those that they are not eligible for do not appear for them.

The database is destroyed at the end of the academic year.