PSYD66-L01: Current Topics in Human Brain and Behaviour
University of Toronto Scarborough
Fall Term, 2018

Instructor Information
Dr. Marie Gadziola ("gad-zee-oh-la")
PO103, Room 122
Office Hours: Wednesday 2-4PM*
**by appointment only - book on Quercus*

Course Information
Lecture Time: Wed 09:00-11:00
Location: HL 008
Email: gadziola.utsc@gmail.com

I. Your Instructor

Dr. Gadziola is a Lecturer in the Department of Psychology. She received her PhD in Neuroscience from Kent State University, followed by postdoctoral research at Case Western Reserve University. Her research and teaching interests are in sensory systems, neuromodulation, and cellular mechanisms of information processing in the CNS.

II. Course description, pre-requisites and learning outcomes

Course description: This seminar class is designed to help you develop and improve two key academic skills: the ability to effectively consume and evaluate primary research articles, and the ability to communicate ideas in written and oral presentation formats. To achieve these goals, together we will take a focused and comprehensive "deep-dive" into the research literature on *tinnitus*. This phenomenon, sometimes called "ringing of the ears", is characterized by phantom perception of sound in the absence of an external source. After covering some foundational material on the auditory system, we will embark on an in-depth examination of current topics and controversies in the field of tinnitus, by way of student-led presentations on primary research articles. Selected course readings will also serve to provide a strong framework for the final term project, which asks students to summarize the literature on tinnitus and develop a novel research proposal related to a specific gap or problem in the field.

Pre-requisites: PSYB65 and one C-level half-credit in PSY.

Learning outcomes: After successful completion of this course, you will be able to:

1. Identify broad themes/concepts tied to ongoing challenges in the field of tinnitus research.
2. Characterize the main features of several different methodologies used to study tinnitus in both humans and animal models.
3. Summarize and critically evaluate primary research articles.
4. Develop effective strategies to design and deliver empirical research to your peers.
5. Synthesize ideas from class discussions and readings to generate thoughtful and creative critiques and novel proposals.
6. Work cooperatively in small groups, providing and receiving constructive peer feedback.
7. Promote lifelong learning with a self-directed approach to skill-building modules and exercises that allow you to self-assess, monitor, and initiate personalized learning goals.

III. Tentative Course Schedule

This outline may be subject to minor revisions with advance notice from the instructor.

WEEK	DATE	TOPIC	IMPORTANT TASKS / DEADLINES
1	**Sept 5**	Course introduction and expectations Fundamentals of the Central Auditory System	Get to know your classmates Pre-course survey due **Sept 9**
2	**Sept 12**	Fundamentals of the Central Auditory System **Skill-building:** successful presentations/discussions	Form groups today
3	**Sept 19**	Tinnitus Foundations	
4	**Sept 26**	Group Presentations (4 groups, 20 mins) *"Neural correlates of tinnitus in the DCN"*	
5	**Oct 3**	Group Presentations (4 groups, 20 mins) *"Neural correlates of tinnitus in the midbrain and cortex"*	Individual topic lottery today
	Oct 10	*Reading Week – no class!*	
6	**Oct 17**	Recap Discussion on Group Presentations **Skill-building:** group reflection and improvement	Article Outline due **Oct 19**
7	**Oct 24**	Creating research proposals **Skill-building:** writing argumentation	
8	**Oct 31**	Solo Presentations (8 students, 10mins)	
9	**Nov 7**	Solo Presentations (8 students, 10mins)	Research Outline due **Nov 11**
10	**Nov 14**	Solo Presentations (8 students, 10mins)	
11	**Nov 21**	Course synthesis	
12	**Nov 28**	*Optional Peer Feedback Day*	Post-course survey due **Dec 3** Final Proposal due **Dec 3**

IV. Course Readings

This course will not use a textbook. Instead, you are responsible for any assigned readings of primary research articles, and to engage in critical discussions during class. With the exception of the foundational core readings, you are responsible for searching and obtaining any full-text articles using the UTSC library resources. Please refer to the course reading list for relevant article citations, and Quercus for support on how to search for articles.

V. Course Website and Supporting Online Modules

The new learning platform, Quercus, will house important course-related announcements, lecture slides (where applicable, to be posted before lecture), online learning modules, discussion boards, grades on term work, and more. I expect that you will check it regularly throughout the term. If you are having difficulty navigating the new platform, it is your responsibility to promptly seek help from the *Student Quercus Guide*.

I will be posting a number of skill-building modules for you to work on in a self-directed manner. These online modules and supplemental readings will introduce and reinforce important skills necessary for successful completion of the course assignments. Based on your prior knowledge and experiences, you can decide whether (and to what extent) you need to go through these supporting documents, and if you wish to participate in the optional exercises for additional practice and to receive feedback on your progress.

The skill-building modules and exercises will include:

- Introduction to academic integrity and what constitutes misconduct
- Introduction to using reference management software
- How to conduct effective article searches
- How to select an appropriate primary source for an idea
- How to appropriately paraphrase the words of others and use APA formatted citations
- Building effective arguments in your writing

VI. Course requirements and grading

Learning how to comprehend, critically analyze, and summarize key elements of primary literature is an absolutely essential skill in the field of psychology. The structure of the course evaluations has been developed in such a way as to progressively prepare you for successful achievement of the learning outcomes, providing multiple opportunities for assessment and progress checks.

The majority of our time in the course will be devoted to student-led primary research article presentations. Every article presented by a group or individual will involve **Presenter(s), Reader(s), and Observer(s) roles**.

The **Presenter** is responsible for being the "expert" on the assigned reading, will summarize the key details of the article for the class, and lead a class discussion (see below).

The **Reader** for a particular article is responsible for doing a detailed reading of the paper (*prior to class*) that will be presented by someone else. You will be required to (i) submit 3 thoughtful discussion questions prior to class and (ii) provide peer feedback to the Presenter. Your role is to support the Presenter by being a backup expert on the topic, and you may be called upon to contribute your ideas during the class discussion on the article.

The **Observer** for a particular article simply acts as any other audience member (i.e. does not need to read the paper, but should attempt to engage with the material and presentation). However, they will be required to submit peer feedback to the Presenter.

For the group presentations, you will work in groups (3 students per group) to share the workload and support each other as you develop your presentation, reading, and peer-evaluation skills. You will work within the same group for the role of the Presenter, Reader, and Observer. Barring exceptional circumstances, all group members will share the same grade on group work.

You are expected to discuss group expectations and member roles in advanced of preparing your group assignments and come to an agreement on how you will distribute the workload and communicate with one another. All group members are expected to pull their weight, and everyone's voice should have the chance to be heard and included in the process. In the event that a group member is not showing a willingness to coordinate and contribute to the team, the remaining group members should contact Dr. Gadziola to raise their concerns *prior to their presentation*.

1. Group presentation on an assigned article (10% overall grade):
Together with two partners of your choosing, you will be randomly assigned to one article from the group presentation reading list and responsible for leading a 20-minute class presentation on the article. If you do not belong to a group by Sept 17th, you will be assigned to a group.

The first part of your presentation should last 10 minutes, and you will be assessed on your ability to convey the most important features of the article (i.e., rationale, hypotheses, key methods and results, interpretations/conclusions). Not everyone in the audience will have read your paper closely, so it will be important for you to *clearly and concisely* summarize the key elements to facilitate audience understanding. You should assume your audience has a background knowledge based on the initial fundamentals and foundations we covered up until the group presentations. For example, this means that you should not waste time in your presentation defining tinnitus and its common causes, or reviewing basics of the auditory system.

The second part of your presentation should also last 10 minutes, and will involve your group leading a critical discussion of the article your group just presented. In addition to your own thoughts and insights into the paper, this time will also be used to field any questions/comments your classmates might have about the article. Your goal here is to help facilitate a thoughtful class discussion, where your fellow classmates are able to engage the material along with you.

2. Individual presentation on an assigned article (15% overall grade):
After the group presentations are finished and you have received feedback on your performance, you will have a second opportunity to present a different article, this time on your own and lasting 10 minutes. You will be given a number to determine the order of article selection. You will select one reading from the individual presentation reading list. Only one student may cover a given paper.

The first part of your presentation should last 5 minutes and you will be assessed on your ability to convey the most important features of the article (i.e., rationale, hypotheses, key methods and results, interpretations/conclusions). Think of this presentation like an "elevator pitch" on the main take-home messages you would like to convey to the class. You will not have time to go over all of the results in the paper. As before, not everyone in the audience will have read your paper, so it will be important for you to *clearly and concisely* summarize the necessary elements to facilitate audience understanding. You should still assume your audience has the same background knowledge, including any lecture and presentation material we have covered prior to reading week. For example, this means you do not need

to waste time in your presentation reviewing the neural correlates of tinnitus that that we have already discussed.

The second part of your presentation should also last 5 minutes, and will involve you leading a critical discussion of the article you just presented. Your goal here is to facilitate a thoughtful class discussion, where your fellow classmates are able to engage the material along with you. It will be important for you to link your article back to earlier class discussions and/or identify future research directions.

3. Class Participation (18% overall grade, total):

You are expected to attend all classes, as student participation is a central component of this class. Your class participation grade is broken down into 3 categories: (a) active participation during class discussions; (b) discussion questions submitted via email (i.e. when you are a "Reader"); and (c) submission of peer evaluations of presentations (i.e. when you are a "Reader" or "Observer").

a) **Active participation during class discussions (8% overall grade).** You are expected to attended all classes. Starting the week of Sept 26th, you will be evaluated on your participation during class, for a total of 8 weeks. You will receive your grade at the end of each week, when applicable. Guidelines and expectations will be discussed in class.

b) **Discussion questions (6% overall grade).** When you are the assigned "Reader" for an article presentation, you will be required to submit 3 thoughtful questions related to the article to me via email the day before the article presentation date (i.e. **Tuesday by noon**). These questions should show evidence of your ability to think critically about the material and should have the potential to stimulate thoughtful class discussion (whether or not they are actually used in class). Guidelines and expectations will be discussed in class.

c) **Peer-evaluation of presentations (4% overall grade).** Both the Reader and Observer will be responsible for submitting peer-evaluations to me via email, due **Friday by 11:59PM** on the week the article is presented. Guidelines and expectations will be discussed in class. Presenters will be rated on their general presentation skills, ability to extract and clearly convey key elements from the article, and how well they were able to lead and facilitate thoughtful class discussions. You will receive training on how to provide high-quality and constructive feedback to your peers. Your peer evaluations will be graded on completeness and quality of the feedback you provide.

4. Final Term Project – Research Proposal (35% overall grade, or 30% if participating in optional peer feedback):

After taking a comprehensive look at the field of tinnitus, the final term assignment will ask you to synthesize what you have learned across the course, and to develop a detailed and innovative research proposal on a topic of your choosing that is related to tinnitus. The aim of this assignment is to provide a high-quality research proposal that could have the potential to be fundable by a granting agency. What this means is that your assignment should contain:

(1) a clear, relevant, and accurate background summary of your chosen topic area;
(2) an accurate and clearly identified "gap in knowledge" that is well-reasoned and demonstrated to be an important issue that requires further study;
(3) a strong and well-supported research question and hypothesis;

(4) a general experimental approach to the proposed research question that is feasible;
(5) a description of predicted results and an interpretation of what they might mean;
(6) a reference list and in-text citations for appropriate and accurate primary sources.

For this assignment, keep in mind that although granting agencies like to reward innovation, they are often risk-averse, meaning that they prefer to fund projects that are realistic/feasible, and likely to contribute important knowledge to the field regardless of the outcome. A successful proposal does not have to be totally wild and involve every cutting-edge technology; in other words, you may find that you are more successful if your proposal is *incremental to the literature* and "safe" in its design.

Your final term project will be due **Monday, December 3rd 2018**. Since this is the last possible day to submit term assignments for the semester, *late assignments will NOT be accepted*. The final term project must be submitted in order to be eligible to pass the class. Therefore, if you fail to turn in your term project by the due date, you cannot pass the class.

The research proposal must be between 5-10 pages, excluding references, and double-spaced with 1" margins. Font should be Times New Roman, font size 12. Referencing must follow the American Psychological Association (APA) citation style guidelines (6th edition). Further details on the assignment will be posted on Quercus early in the term. This research proposal will be evaluated by Turnitin.

Optional peer feedback on research proposal. If you choose to participate in the optional peer feedback, you can have your final research proposal re-weighted to be worth only 30% of your overall grade. The remaining 5% of your grade will then be based on your participation in the peer feedback session. The 5% is not a guarantee solely based on attendance; you must show that you have a significant amount of your research proposal already completed, discuss your proposals with at least one other student in the class, and respond to a few short questions about the feedback you gave and received.

5. Required Assignments

a) Pre-post Course Surveys (2% of final grade). You will be asked to complete two self-surveys via Quercus – one at the beginning of the semester and one towards the end. The purpose of these self-assessments is to allow us to understand where your skills are at coming into this class and encourage you to actively reflect on your skill development and learning process across the course. There are no "correct answers", but you must provide full responses for full marks. You must complete both surveys to earn this credit.

Pre-course Survey Due Date: **Sept 9th, 11:59PM**
Post-course Survey Due Date: **Dec 3rd, 11:59PM**

b) Assigned Individual Article Summary (10% of final grade). This assignment will have you: (1) complete a detailed reading of your assigned individual presentation article, (2) summarize the key elements of the article, and (3) respond to some questions related to how you plan to present the material to the class.

DUE: Oct 21st by 11:59PM

** Note: this assignment will be evaluated by Turnitin*

c) Research Proposal Outline (10% of final grade). You will be asked to submit an outline of your research proposal 3 weeks prior to the due date, so that you have an opportunity to receive feedback on your progress. This assignment will have you: (1) identify the topic area you plan to

base your research proposal on (2) briefly summarize the background research you have done and identify the "gap in knowledge" you think is important to address (3) outline your proposed research question and hypothesis; (4) include a list of at least 3 primary articles (outside of the class reading list) related to your topic area that you have found and believe to be essential for understanding your topic area.

DUE: November 11th by 11:59PM

** Note: this assignment will be evaluated by Turnitin*

6. Optional Skill-building Assessments (*up to 8% of final grade re-distributed from other assignments*)

You will have the opportunity to complete several small exercises throughout the course that aim to help keep you on track, scaffold your skill development, and provide you feedback on your progression in this course. While I strongly encourage that you take advantage of all assessment opportunities, you will get to take a self-directed approach to your learning and choose which optional assessments you will submit. You can choose to complete no, some, or all optional assessments. In addition to the practice and feedback you will receive, satisfactory completion of these exercises will allow you to re-distribute the percentage point indicated from one of the required assignments, as specified. If you happen to receive a lower score on an optional assessment than on the associated assignment, the higher grade will always be taken.

Optional assessment guidelines and submission details will be posted on Quercus. Recommended submission dates are suggestions to help you pace yourself and manage your time effectively. I recommend completing the first three optional assessments as early as possible, before the workload of your other classes picks up. The due dates listed have already been delayed as far as possible to give you as much flexibility as I can. For this reason, late submissions of optional assessments will not be accepted.

a) **Optional Assessment #1: Academic Integrity (*re-distribute 1% of final grade from article summary*).** The purpose of this exercise is to refresh and reinforce your understanding of academic integrity and the different types of academic misconduct. For help with this exercise, please review the material provided in the online learning module *Optional Exercise #1 – Academic Integrity.*

Recommended submission date: week 1

DUE: Oct 7th by 11:59PM

b) **Optional Assessment #2: Download Mendeley and import an article (*re-distribute 1% of final grade from research proposal outline*).** The purpose of this exercise is to encourage the use of a citation management system to help you organize primary sources related to your research proposal and save you the hassle of correctly formatting your citations and reference list. You will be asked to register for a Mendeley account (free), import an article from the class reading list, and then submit a screenshot that shows your user name and imported article. For help with this exercise, please review the material provided in the online learning module *Optional Exercise #2 - Mendeley*

Recommended submission date: week 2

DUE: Oct 7th by 11:59PM

c) **Optional Assessment #3: Selecting appropriate primary sources (*re-distribute 1% of final grade from research proposal outline*).** This assignment will allow you to demonstrate that you are able to

find accurate and appropriate primary sources. I will give you a particular tinnitus-related statement and ask you to find the best primary source(s) for that idea that you would use in a citation. For help with this exercise, please review the material provided in the online learning module *Optional Exercise #3 – Finding appropriate primary sources.*

Recommended submission date: week 3
DUE: Oct 7th by 11:59PM

d) **Optional Assessment #4: Appropriately paraphrased tinnitus summary (*re-distribute 2% of final grade from article summary*).** The purpose of this assignment is to have you briefly introduce/summarize tinnitus in your own words. You will be evaluated on your ability to clearly and concisely describe tinnitus in your own words, and to focus on one feature of tinnitus that you find most interesting. You should provide appropriate in-text citations and demonstrate your ability to paraphrase the work of others. You will be asked to submit a DRAFT version first. After receiving feedback, you will have the ability to re-submit a final version if major corrections are necessary.

Recommended submission date: week 4
DUE: Oct 7th by 11:59PM
** Note: this assignment will be evaluated by Turnitin*

e) **Optional Assessment #5: Reflection on group presentations (*re-distribute 2% of final grade from research proposal outline*).** After completion of all group presentations, this 1-page written assignment will ask you to: (1) summarize and reflect on the neural correlates and potential mechanisms of tinnitus that we have discussed so far; (2) highlight a major "gap in knowledge" in the tinnitus field that interests you.

Recommended submission date: week 6
DUE: Oct 16th by 11:59PM
** Note: this assignment also requires submission to a Turnitin link.*

f) **Optional Assessment #6: Groupwork reflection and improvement plan (*re-distribute 1% of final grade from article summary*).** After completion of all group presentations, we will spend some time discussing what went well and what didn't in terms of group dynamics and execution of presentations. This exercise will have you reflect on your own experiences and propose effective strategies for improving the development of your individual presentation.

Recommended submission date: week 7
DUE: Oct 28th by 11:59PM
** Note: this assignment also requires submission to a Turnitin link.*

General Grading Rubric

A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-
90%+	85-89	80-84	77-79	73-76	70-72	67-69	63-66	60-62	57-59	53-56	50-52

VII. Course policies

Classroom conduct. Our classroom is a place where everyone should always feel safe and respected. It is also a place that is conducive to learning and intellectual curiosity. To help create this learning environment, I ask that you always use respectful language, minimize potential distractions during class (e.g., off-topic chatting, Facebook), show up to class on time, support your peers, and genuinely try your best every day.

Classroom attendance and late policy. To achieve the learning outcomes of this course (and out of respect for your classmates), you are expected to participate fully in each class. This means that you need to attend all classes, and you are expected to show up on time. Unexcused absences will result in 0% grade on any participation (e.g., active participation, peer evaluations) or presentations that were scheduled to take place that class. Any student that is late to class will have a penalty applied to any participation grade that is scheduled to take place that class. If any group member is late on the day of your group presentation, the entire group will have a late penalty applied to their grade.

Email policy. All course-related correspondence should be sent to gadziola.utsc@gmail.com from your utoronto.ca email. In most cases, e-mails will be answered within 48 hours of receipt (excluding weekends and holidays). Please keep your emails professional, concise, and clear: start with an informative subject title that includes the course code and some detail regarding your question (e.g., "PSYD66: question about research proposal"). Your email should include your full name and student ID number so that I know who you are. A short email based around a single question, with some level of effort to explain your understanding or where you are stuck, will likely be most effective.

Lecture Slides. For your convenience, lecture slides and notes will be posted prior to each class, where applicable (typically by 10PM the evening before a lecture). They will be posted in PDF format with 1 slide per page. You should know that the lecture slides are not a suitable substitute for attending lecture. Lecture slides are not exhaustive and we will regularly cover important material that extends beyond them during lecture. In addition to course content, there will be additional skill-building opportunities that are only effective if you are in class.

Copyright of lecture material. Instructional materials (lecture slides, handouts, articles) are only for the purpose of learning in this course and must not be distributed or used for any other reason whatsoever. As protection of copyright, the unauthorized use, copying, or uploading on the internet of lecture handouts is strictly prohibited.

Video and Auditory Recording. For reasons of privacy as well as protection of copyright, unauthorized video or audio recording in classrooms is prohibited. This is outlined in the Provost's guidelines on *Appropriate Use of Information and Communication Technology*. Note, however, that these guidelines include the provision that students may obtain consent to record lectures and, "in the case of private use by students with disabilities, the instructor's consent must not be unreasonably withheld."

Presentation expectations. For both the group and individual presentations, you must use Microsoft PowerPoint (or a comparable program). You are responsible for ensuring that your presentation will run *prior* to the start of class. This means that you should arrive early on your presentation day, and come prepared with your presentation saved on a flash drive. If you plan to run your presentation from your personal laptop, you must have all the necessary adaptors to ensure your laptop will connect with the

projector. We will review more detailed expectations in class and discuss strategies for successful presentations and leading discussions.

Contesting a grade. All requests for a re-grade must be submitted in writing within two weeks of the day the grade is received. Only requests that include adequate written justification of an error in the original grading will be considered. A legitimate request will result in the entire assignment being re-graded. Your overall grade may be raised, lowered, or it may stay the same. Arbitrary requests for grade increases will not be entertained (e.g., "I need to get into grad school, so could you please give me a higher grade?").

Office hours. Office hour appointments should be booked in advance via Quercus calendar. Please contact me if you cannot make the designated times. Office hours are a valuable resource for you to learn more about the class and/or important things related to (but outside of) the class. You should consider visiting office hours if you would like to (1) discuss course content or your presentations, (2) if you have an issue with course performance or progress, or (3) you would like to discuss the field of psychology/neuroscience and how to get more involved.

Syllabus changes. There may be minor changes to the syllabus during the term. You will be notified of these changes ASAP and no changes will be instituted that dramatically affect your ability to reasonably prepare for a class.

Scheduling conflict. A web option will not be offered for this course, so it is your responsibility to ensure that you are able to attend all the lectures. Given the nature of the material and course, attendance is critical to your success. If you have an ongoing conflict with lecture time, you should strongly consider dropping the course or adjusting your schedule to allow you to attend. Accommodations are not possible for scheduling conflicts.

VIII. Access*Ability*

Students with diverse learning styles and needs are welcome in this course! In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the Access*Ability* Services Office as soon as possible.

Access*Ability* Services staff (located in Rm SW302, Science Wing) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations 416-287-7560 or email ability@utsc.utoronto.ca. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

IX. Academic Integrity

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppjun011995.pdf) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement;
- Submitting your own work in more than one course without the permission of the instructor;
- Making up sources or facts;
- Obtaining or providing unauthorized assistance on any assignment.

On tests and exams:

- Using or possessing unauthorized aids;
- Looking at someone else's answers during an exam or test;
- Misrepresenting your identity; and
- When you knew or ought to have known you were doing it.

In academic work:

- Falsifying institutional documents or grades;
- Falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes; and
- When you knew or ought to have known you were doing so.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If students have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, they are expected to seek out additional information on academic integrity from their instructors or from other institutional resources.

Note: You may see advertisements for services offering grammar help, essay editing and proof-reading. Be very careful. If these services take a draft of your work and significantly change the content and/or language, you may be committing an academic offence (unauthorized assistance) under the *Code of Behaviour on Academic Matters.*

It is much better and safer to take your draft to the Writing Centre as early as you can. They will give you guidance you can trust. Students for whom English is not their first language should go to the English Language Development Centre.

If you decide to use these services in spite of this caution, you must keep a draft of your work and any notes you made before you got help and be prepared to give it to your instructor on request.

TurnItIn: Normally, students will be required to submit their course essays/assignments to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site.

This class may be important to you, but not so important as to gamble with your academic career by cheating. If you find yourself wondering if something constitutes academic misconduct, I encourage you to investigate the subject more thoroughly before acting – not knowing that something is considered academic misconduct does not protect you from trouble! Knowing is half the battle! Consider visiting http://uoft.me/academicdishonesty.

X. Missed Term Work due to Medical Illness or Other Emergency

All students citing a documented reason for missed term work must bring their documentation to the Psychology Course Coordinator in SW427C **within three (3) business days** of the assignment due date. You must bring the following:

(1.) A completed Request for Missed Term Work form (http://uoft.me/PSY-MTW), and
(2.) Appropriate documentation to verify your illness or emergency, as described below.

Appropriate Documentation:

For missed **TERM TESTS** due to ILLNESS:

- Submit an **original** copy of the official UTSC Verification of Illness Form (http://uoft.me/UTSC-Verification-Of-Illness-Form) or an **original** copy of the record of visitation to a hospital emergency room. Forms are to be completed in full, clearly indicating the start date, anticipated end date, and severity of illness. The physician's registration number and business stamp are required.

For missed **ASSIGNMENTS** due to ILLNESS:

- Submit **both** (1.) a **hardcopy** of the Self-Declaration of Student Illness Form (http://uoft.me/PSY-self-declare-form), **and** (2.) the **web-based** departmental declaration form (http://uoft.me/PSY-self-declare-web).

For missed term tests or assignments in OTHER CIRCUMSTANCES:

- In the case of a **death of a family member**, a copy of a death certificate should be provided.
- In the case of a **disability-related concern**, an email from your Disability Consultant at AccessAbility Services should be sent directly to both the Course Coordinator (psychology-undergraduate@utsc.utoronto.ca) and your instructor, detailing the accommodations required.
- For U of T Varsity **athletic commitments**, an email from your coach or varsity administrator should be sent directly to the Course Coordinator (psychology-undergraduate@utsc.utoronto.ca), detailing the dates and nature of the commitment. The email should be sent **well in advance** of the missed work.

Documents covering the following situations are **NOT acceptable**: medical prescriptions, personal travel, weddings, or personal/work commitments.

Procedure:

Submit your (1.) request form and (2.) medical/self-declaration/other documents in person **WITHIN 3 BUSINESS DAYS** of the missed term test or assignment.

Submit to: Course Coordinator, Room SW427C, Monday – Friday, 9 AM – 4 PM

If you are unable to meet this deadline for some reason, you must contact the Course Coordinator via email (psychology-undergraduate@utsc.utoronto.ca) within the three business day window. Exceptions to the documentation deadline will only be made under exceptional circumstances.

Within approximately one week, you will receive an email response from the Course Instructor / Course Coordinator detailing the accommodations to be made (if any). You are responsible for checking your official U of T email and Quercus course announcements daily, as accommodations may be time-critical.

Completion of this form does NOT guarantee that accommodations will be made. The course instructor reserves the right to decide what accommodations (if any) will be made. **Failure to adhere to any aspect of this policy may result in a denial of your request for accommodation.**

Note that this policy applies only to missed assignments and term tests. Missed final exams are handled by the Registrar's Office (http://www.utsc.utoronto.ca/registrar/missing-examination).

XI. Course-specific Accommodation Policies for Missed Term Work

You must also notify Dr. Gadziola that you are in the process of requesting accommodations **within three (3) business days** of the assignment due date. Missed term work not granted accommodations will receive a 0% mark. The accommodations available for students with valid excuses for missing term work will depend on the type of missed work and the circumstance.

a) **Missed group presentation.** Students with a valid excuse for missing their group presentation will be considered on a case-by-case basis. Depending on the circumstance, the individual may be given a make-up opportunity at a later date (on their own) or will have their presentation grade points re-distributed to their individual presentation.

   Please note: In the event that a group member is absent on the group presentation day, the remaining group members will still be expected to complete the entire presentation.

b) **Missed individual presentation.** Students with a valid excuse for missing their individual presentation will be considered on a case-by-case basis. Depending on the circumstance, the individual may be given a make-up opportunity at a later date, or will have their presentation grade points re-distributed to their final research proposal.

c) **Missed required assignments.** Students with valid excuses for missing assignment deadlines (article summary, proposal outline) will be granted extensions without penalty. Please note that any delays in assignment submission will result in less time for you to receive and incorporate instructor feedback before your presentation date or final research proposal is due.

d) **Missed optional assessments.** There will be no make-up opportunities for missed optional exercises. You will be provided with a large window of time to complete these exercises. The nature of these assignments is to be self-paced, and I recommend not leaving the submission too close to the final deadline to risk having an illness or other emergencies interfere with your ability to submit your work before the deadline.

e) **Missed participation.** Students granted accommodations for missing participation-related assessments (active participation in class, discussion questions, peer evaluations) may have the possibility for a make-up opportunity, and need to contact Dr. Gadziola as soon as possible. If a make-up opportunity is not possible, students will have their remaining participation assessments within the same subcategory re-weighted to compensate for the missed work. For example, if a student has a valid reason for missing one week of class, their total *active participation* grade will now be averaged across 7 weeks instead of 8 at the end of the term.

Course Reading List

Core Readings: Fundamentals of the Auditory System & Tinnitus (available on Quercus)

Read prior to class on Sept 12th

Møller, A. R., Langguth, B., DeRidder, D., & Kleinjung, T. (2010). Chapter 8: Anatomy and Physiology of the Auditory System. *Textbook of Tinnitus*. Springer New York.

Read prior to class on Sept 19th

Møller, A. R., Langguth, B., DeRidder, D., & Kleinjung, T. (2010). Chapter 1: Introduction. *Textbook of Tinnitus*. Springer New York.

Brozoski, T. J., & Bauer, C. A. (2016). Animal models of tinnitus. *Hearing Research*, *338*, 88–97.

Group Presentation Day 1 – Sept 26th 2018 (*"Neural correlates of tinnitus in the DCN"*)

1. Kaltenbach, J. A., Zhang, J., & Afman, C. E. (2000). Plasticity of spontaneous neural activity in the dorsal cochlear nucleus after intense sound exposure. *Hearing Research*, *147*(1), 282–292.
2. Brozoski, T. J., & Bauer, C. A. (2005). The effect of dorsal cochlear nucleus ablation on tinnitus in rats. *Hearing Research*, *206*(1), 227–236.
3. Finlayson, P. G., & Kaltenbach, J. A. (2009). Alterations in the spontaneous discharge patterns of single units in the dorsal cochlear nucleus following intense sound exposure. *Hearing Research*, *256*(1), 104–117.
4. Middleton, J. W., Kiritani, T., Pedersen, C., Turner, J. G., Shepherd, G. M. G., & Tzounopoulos, T. (2011). Mice with behavioral evidence of tinnitus exhibit dorsal cochlear nucleus hyperactivity because of decreased GABAergic inhibition. *Proceedings of the National Academy of Sciences*, *108*(18), 7601–7606.

Group Presentation Day 2 – Oct 3rd 2018 (*"Neural correlates of tinnitus in the midbrain and cortex"*)

5. Robertson, D., Bester, C., Vogler, D., & Mulders, W. H. A. M. (2013). Spontaneous hyperactivity in the auditory midbrain: Relationship to afferent input. *Hearing Research*, *295*(Supplement C), 124–129.
6. Ma, W.-L. D., Hidaka, H., & May, B. J. (2006). Spontaneous activity in the inferior colliculus of CBA/J mice after manipulations that induce tinnitus. *Hearing Research*, *212*(1), 9–21.
7. Mühlnickel, W., Elbert, T., Taub, E., & Flor, H. (1998). Reorganization of auditory cortex in tinnitus. *Proceedings of the National Academy of Sciences of the United States of America*, *95*(17), 10340–10343.
8. Langers, D., de Kleine, E., & van Dijk, P. (2012). Tinnitus does not require macroscopic tonotopic map reorganization. *Frontiers in Systems Neuroscience*, *6*(2).

Individual Presentation Day 1 – Oct 31st 2018

1. Reyes, S. A., Salvi, R. J., Burkard, R. F., Coad, M. Lou, Wack, D. S., Galantowicz, P. J., & Lockwood, A. H. (2002). Brain imaging of the effects of lidocaine on tinnitus. *Hearing Research*, *171*(1), 43–50.
2. Mühlau, M., Rauschecker, J. P., Oestreicher, E., Gaser, C., Röttinger, M., Wohlschläger, A. M., … Sander, D. (2006). Structural Brain Changes in Tinnitus. *Cerebral Cortex*, *16*(9), 1283–1288.
3. Stolzberg, D., Chen, G.-D., Allman, B. L., & Salvi, R. J. (2011). Salicylate-induced peripheral auditory changes and tonotopic reorganization of auditory cortex. *Neuroscience*, *180*(Supplement C), 157–164.
4. Leaver, A., Seydell-Greenwald, A., Turesky, T., Morgan, S., Kim, H., & Rauschecker, J. (2012). Cortico-limbic morphology separates tinnitus from tinnitus distress. *Frontiers in Systems Neuroscience*, *6*(21).
5. Chen, G.-D., Manohar, S., & Salvi, R. (2012). Amygdala hyperactivity and tonotopic shift after salicylate exposure. *Brain Research*, *1485*(Supplement C), 63–76.
6. Leaver, A. M., Renier, L., Chevillet, M. A., Morgan, S., Kim, H. J., & Rauschecker, J. P. (2011). Dysregulation of Limbic and Auditory Networks in Tinnitus. *Neuron*, *69*(1), 33–43.
7. Boyen, K., de Kleine, E., van Dijk, P., & Langers, D. R. M. (2014). Tinnitus-related dissociation between cortical and subcortical neural activity in humans with mild to moderate sensorineural hearing loss. *Hearing Research*, *312*(Supplement C), 48–59.
8. Davies, J. E., Gander, P. E., & Hall, D. A. (2017). Does Chronic Tinnitus Alter the Emotional Response Function of the Amygdala?: A Sound-Evoked fMRI Study. *Frontiers in Aging Neuroscience*, *9*, 31.

Individual Presentation Day 2 – Nov 7th 2018

9. Chen, Y.-C., Li, X., Liu, L., Wang, J., Lu, C.-Q., Yang, M., … Teng, G.-J. (2015). Tinnitus and hyperacusis involve hyperactivity and enhanced connectivity in auditory-limbic-arousal-cerebellar network. *eLife*, *4*, e06576.
10. Chen, Y.-C., Chen, G.-D., Auerbach, B. D., Manohar, S., Radziwon, K., & Salvi, R. (2017). Tinnitus and hyperacusis: Contributions of paraflocculus, reticular formation and stress. *Hearing Research*, *349*(Supplement C), 208–222.
11. Ouyang, J., Pace, E., Lepczyk, L., Kaufman, M., Zhang, J., Perrine, S. A., & Zhang, J. (2017). Blast-Induced Tinnitus and Elevated Central Auditory and Limbic Activity in Rats: A Manganese-Enhanced MRI and Behavioral Study. *Scientific Reports*, *7*, 4852.
12. Hébert, S., Paiement, P., & Lupien, S. J. (2004). A physiological correlate for the intolerance to both internal and external sounds. *Hearing Research*, *190*(1), 1–9.
13. Hébert, S., & Lupien, S. J. (2007). The sound of stress: Blunted cortisol reactivity to psychosocial stress in tinnitus sufferers. *Neuroscience Letters*, *411*(2), 138–142.

14. Cransac, H., Cottet-Emard, J.-M., Hellström, S., & Peyrin, L. (1998). Specific sound-induced noradrenergic and serotonergic activation in central auditory structures. *Hearing Research*, *118*(1), 151–156.
15. Tang, Z.-Q., & Trussell, L. O. (2018). Serotonergic Modulation of Sensory Representation in a Central Multisensory Circuit Is Pathway Specific. *Cell Reports*, *20*(8), 1844–1854.
16. Galazyuk, A. V, Voytenko, S. V, & Longenecker, R. J. (2017). Long-Lasting forward Suppression of Spontaneous Firing in Auditory Neurons: Implication to the Residual Inhibition of Tinnitus. *Journal of the Association for Research in Otolaryngology*, *18*(2), 343–353.

Individual Presentation Day 3 – Nov 14th 2018

17. Shore, S. E., Koehler, S., Oldakowski, M., Hughes, L. F., & Syed, S. (2008). Dorsal cochlear nucleus responses to somatosensory stimulation are enhanced after noise-induced hearing loss. *European Journal of Neuroscience*, *27*(1), 155–168.
18. Marks, K. L., Martel, D. T., Wu, C., Basura, G. J., Roberts, L. E., Schvartz-Leyzac, K. C., & Shore, S. E. (2018). Auditory-somatosensory bimodal stimulation desynchronizes brain circuitry to reduce tinnitus in guinea pigs and humans. *Science Translational Medicine*, *10*(422).
19. Okamoto, H., Stracke, H., Stoll, W., & Pantev, C. (2010). Listening to tailor-made notched music reduces tinnitus loudness and tinnitus-related auditory cortex activity. *Proceedings of the National Academy of Sciences* , *107*(3), 1207–1210.
20. Engineer, N. D., Riley, J. R., Seale, J. D., Vrana, W. A., Shetake, J. A., Sudanagunta, S. P., … Kilgard, M. P. (2011). Reversing pathological neural activity using targeted plasticity. *Nature*, *470*, 101.
21. Noreña, A. J., & Eggermont, J. J. (2005). Enriched Acoustic Environment after Noise Trauma Reduces Hearing Loss and Prevents Cortical Map Reorganization. *The Journal of Neuroscience*, *25*(3), 699 LP-705.
22. Müller, N., Lorenz, I., Langguth, B., & Weisz, N. (2013). rTMS Induced Tinnitus Relief Is Related to an Increase in Auditory Cortical Alpha Activity. *PLOS ONE*, *8*(2), e55557.
23. Zachriat, C., & Kröner-Herwig, B. (2004). Treating chronic tinnitus: Comparison of cognitive-behavioural and habituation-based treatments. *Cognitive Behaviour Therapy*, *33*(4), 187–198. https://doi.org/10.1080/16506070410029568
24. Roland, L. T., Lenze, E. J., Hardin, F. M., Kallogjeri, D., Nicklaus, J., Wineland, A. M., … Piccirillo, J. F. (2015). Effects of Mindfulness Based Stress Reduction Therapy on Subjective Bother and Neural Connectivity in Chronic Tinnitus. *Otolaryngology–Head and Neck Surgery*, *152*(5), 919–926.