Exam Jam is one of UTM's largest and most anticipated events in the academic year. From exam review sessions to FSGs to wellness stations, Exam Jam is students’ one stop shop for getting prepped and feeling good for the upcoming exam season!

**Quick Facts**

- **18** therapy dogs present (Dec. 2017 and Apr. 2018)
- **96%** of previous participants would recommend Exam Jam to a friend.
- **97%** of surveyed instructors feel Exam Jam helps prepare their students for exams.
- **3125** students attended review sessions in April 2018.
- **942** fruits, veggies and smoothies consumed (Dec. 2017 and Apr. 2018)
- **94** courses represented by exam review sessions and mega-FSGs
INTRODUCTION

We know from instructor and student feedback collected at UTM, as well as from research based on evidence from other institutions, that instructor-led exam review is a successful tool to help students prepare for final exams and achieve better results. Research on exam review sessions is scarce and mostly anecdotal or mainly focused on students’ attitudes. Several recent studies analyze a number of review methods and strategies to compare their effects and benefits. Research is inconclusive regarding the effectiveness of different types of exam review sessions but students seem to prefer non-traditional and interactive review types (Hackathorn, J., Cornell, K. et al., 2012). Students tend to prefer practices that mimic exam questions (providing them with a “sneak-peek” of the actual test), are interactive, and involve low-stress activities.

Based on recommendations from UTM instructors and on published literature, this guide offers:

- an overview of several types and methods of exam review
- general recommendations for planning exam review sessions
- suggested further readings

---

1 For example, in Spring 2016, 97% of surveyed instructors who participated felt Exam Jam is an effective means of helping to prepare students for their examinations.

2 We thank all UTM instructors who shared with us their practices and recommendations in post-sessions surveys and elsewhere. In particular, we thank Dr. Mairi Cowan and Dr. Gabriela Pawlus-Kasprzak for providing their valuable feedback about Exam Jam reviews.
TYPES OF REVIEW APPROACHES

SMALL GROUP WORK

Instructors in the past have successfully used a number of approaches based on small group work to implement exam review sessions.

1. Close-ended mock exam questions review:

Students are divided into small groups. Each group receives a mock exam question and works together to formulate a solution. Facilitators (course instructors in this case) circulate between groups and help facilitate discussion. If time permits, the instructor reviews one answer for the entire class and explains what score this answer would receive. The process is repeated for each type of question included within the exam.

Goals: Students practice understanding and answering typical exam questions in a low-stress environment, get instructor’s feedback, and clarify evaluation criteria for different types of questions.

2. Open-ended problem solving review (concept list):

Individually, students record what they perceive as the 5 most important facts, theories, or concepts from the course. Students form small groups, compare lists, and compile a shared list for each group. In a popcorn-style discussion, groups share their list items. Using a blackboard, flipchart, or a screen writing tool, instructor compiles student responses and adds topics that may have been missed. Instructor lists topics in order of importance (or ranges) and explains reasoning and/or creates a concept map. Next, students break out into small groups again and create 2-3 multiple choice questions which are answered by the large group. [Adopted from Favero, 2011.]

Goals: Students identify key concepts, facts and theories crucial for good performance on the exam.

3. Open-ended problem solving review (strategy brainstorming):

Students bring their study materials (lecture notes, texts, previous work etc.) to the review session. Students are divided into small groups. Instructor provides each group with a different mock exam question. Each group develops a strategy for how to prepare to answer their assigned
question. Each group then shares their strategy with the class. Instructor provides comments and feedback.

**Goals:** Early in the review process, students identify effective strategies to prepare for the exam. At the same time, they review their study materials in groups and possibly identify and fill gaps in their notes and knowledge.

### 4. Puzzle review

Instructor creates crossword puzzles as a means of reviewing course material. Students work in pairs or groups to complete crossword puzzles. This activity can be combined with other review approaches. This can be done in open-book or closed-book environment. In large classrooms, students can work in pairs with their neighbor instead of small groups. [Adopted from Weisskirch, 2006.]

**Goals:** Students review key concepts and facts of the course in a fun and exciting group-work environment. If done in open-book environment, they also review their study materials in groups and possibly identify and fill gaps in their notes and knowledge.

### 5. Game-style exam review

Instructors create a series of questions similar to exam questions prior to the session. Students are randomly assigned to groups of 5 or 6. Groups get a limited time period to discuss each question. Students take turns representing their group for each question. Points are awarded to each group/team for a correct answer. After the game, the instructor provides feedback.

Game variations include:

- “Jeopardy style” trivia and other quiz games
- Sentence-making games such as exquisite cadaver and sentence bingo (great for language studies courses)
- Charades
- “Connections” game: a number of terms are put on the board; students come up in groups or individually to connect any two terms and describe how they are connected.

**Goals:** Students practice understanding and answering typical exam questions in a fun, competitive yet low-stress environment. When playing sentence-making games, students review syntax structure and vocabulary.
6. Instructor-centered past exam review

Instructors project and review exam questions (and answers) on the screen. Students participate in popcorn-style discussion, offering questions and answers. Works well in large classrooms with limited time and no TA support available.

Goals: Students become familiar with exam structure, different question types, and effective strategies for responding.

7. Clicker-based interactive sample exam review

Sample exam questions are projected on the screen. Students work with their neighbour(s) or in small groups to answer them and then use clickers to submit answers. Once all the answers are submitted, the instructor reviews the answers for the entire classroom. Answers that most students got right are explained briefly; answers that fewer students got right are explained in more detail. Instructor might post questions, answers and explanations online after the sessions for future reference and review. [Adopted from King]

In a variation of this approach, after the first round of answers are submitted, students are to talk to a neighbour about which answer they believe is correct, and then all students have the opportunity to change their answer. After this second round of responses, instructors provide the answer and an explanation (varying up the detail as appropriate).

Goals: Students practice understanding and answering typical exam questions, get instructor’s feedback and clarify evaluation criteria for different types of questions.

8. Random page sample exam review

Instructor prepares a large number of sample questions relevant to the final exam (possibly based on past exams/tests). Each page contains 5 or 6 questions. During the session, instructor asks students to pick a page at random and displays the page on the screen or distributes copies to students. Students work on selected questions and instructor engages in a facilitated discussion. Based on the discussion, instructor may identify topics that need additional review and practice. Pages of questions that do not have a chance to be reviewed at the session are posted on
BlackBoard. Students are encouraged to continue practicing and discussing them in groups after the session, utilizing strategies they developed and practiced during the session.

**Goals:** Students practice understanding and answering typical exam questions, get instructor’s feedback and clarify evaluation criteria for different types of questions. During multiple question reviews, they learn to identify learning strategies that work best for them.

### 9. Post-mortem review

Students are provided with an opportunity to complete a mock exam (or past exam) in class, or online prior to the review session, in conditions similar to those of the actual exam (for example, no collaboration, closed book, time limit). Students may be provided with grading keys for questions to mark their exams. Answers are then reviewed by instructor. Student questions and other contributions are encouraged.

**Goals:** Students practice understanding and answering typical exam questions while clarifying their expectations about the actual exam.

### 10. “Do-it-yourself” practice exam

Each student in the class creates an exam review question with an accompanying answer as part of their participation grade, posting both on Blackboard. Instructor verifies the answers and compiles the questions in an exam-style format, which is distributed to students at the exam review session. Students can then complete this “practice exam” in class or at home, with the answers available online.

**Goals:** Students improve their understanding of exam question logic and structure as they review and synthesize course material. At the exam review session, they practice understanding and answering typical exam questions and clarify their expectations about the actual exam.

### 11. *NEW TO EXAM JAM:* FSG-leader assisted instructor-led review session

Sessions facilitated by instructors can be combined with Facilitated Study Groups (FSGs). FSG exam review sessions has been increasingly popular among students in the recent years. Various forms of combining FSGs with exam review have been successfully implemented at UTM Exam Jams. Instructors can collaborate with FSG leaders (who are often their former students and/or research assistants) and utilize their help as peer leaders to organize and moderate group work during the review session. Alternatively, an instructor-led review session, attended by FSG
leaders, can be followed immediately by a Mega FSG (see below) to provide students with more opportunities to practice strategies and problems reviewed at the session.

**Goals:** Students clarify “muddy points” and practice understanding and answering typical exam questions while solving problems in low-stress environment with more experienced peers.

### 11a. Mega FSGs

Mega FSGs are prepared and facilitated by FSG leaders. The mega-FSG is a large FSG, featuring multiple groups working at the same time with their own leader and one central facilitator. They are often focused on general reviews of course material and exam prep. FSG leaders can propose a mega FSG session plan to course instructors as part of their internship course. If needed, Program Assistants are available for consultation with the course instructor.

### 11b. Hybrid Instructor Review/Mega FSG Sessions:

Hybrid sessions fuse together the mega-FSG session with an exam review session. They are prepared and facilitated by the course instructor and/or FGS leaders and Program Assistants, in consultation or in cooperation with the course instructor. FSG leaders can propose a hybrid session to course instructors as part of their internship course. These sessions can be facilitated in the following ways:

1. Instructor as the central facilitator with FSG leaders working in small groups
2. Co-facilitated by instructor and an FSG leader
3. FSG leaders with instructor providing general supervision and answering questions when needed.

Instructors who have questions about any kind of FGS involvement or interested in organizing hybrid sessions are welcome to contact Thomas Klubi (thomas.klubi@utoronto.ca) at the RGASC.

### UNSTRUCTURED (AKA THE “TRADITIONAL APPROACH”)

Students come prepared to ask questions, and the instructor answers student questions for the entire class/group. The success of such review sessions is contingent on students coming to class prepared to ask questions.

Unstructured review sessions tend to fail in first-year classes. They often result in a passive experience for most students in the class “just another lecture” and tend to exclude shy students. They also do not seem to be effective in helping students evaluate their level of preparedness and get real-life examples of exam situations.

**However, this method may work well in the following situations:**

- For upper-level courses where most students are more experienced learners
For small classes where all (or most) students get a chance to ask questions
For students who have time to review course material before the review session, especially if they are provided with review and practice strategies beforehand.

GENERAL RECOMMENDATIONS FOR PLANNING EXAM REVIEW SESSIONS

The following list of recommendations is primarily based on feedback from UTM instructors who participated in past Exam Jam reviews as well as scholarly literature on teaching and learning.

➢ Consider your audience: is it an introductory survey or a third-year course? How large is the course? Did students have experience utilizing active participation throughout the term? Have they proved to be active and take initiative?
➢ If your course has FSGs, consider involving them in your Exam Jam review planning and delivery. Not only will this approach allow using more active review strategies; it can also save you much time and effort in planning and preparing your session.
➢ Consider taking a quick survey beforehand to get an idea of what methods and types of review your students prefer. For example, instructors have had students brainstorm ideas in the final class and selected most popular ideas to be implemented at the review session.
➢ Consider the timing of the review session and your final exam to plan your review accordingly. For example, students may not come prepared with questions if they had no time to review course material. Offering a lot of online review material for post-session review is unlikely to be productive if students have little or no time between the review session and actual exam.
➢ Make sure students know what to expect at the session and come prepared. If relevant, remind students to bring their course materials.
➢ Consider combining different methods to accommodate various personalities and learning types and preferences.
➢ Consider preparing a back-up plan if you are trying a new method and are not sure if it will work in your class.
➢ If possible, consider involving TAs in review sessions as co-facilitators (for example, to help coordinate small group work). Limited funds are available at OST to pay graduate student TAs for supporting Exam Jam.
➢ It is helpful to plan your review preparation time in advance. Instructors find that it takes between one hour and half-a-day to prepare a review session.
➢ If you have prepared a study guide for your students, consider using it as a tool for at least part of your review session.
➢ Feel free to utilize BlackBoard/Portal and other learning management and web tools to post materials before, during or after the session for preparation or future reference and review.
➢ Consider utilizing technological tools such as clickers and/or podcasts of the exam review session for future reference and access by students who could not attend the session.
If you feel that your students may benefit from improving their general study strategies and exam preparation strategies in particular, refer them to Robert Gillespie Academic Skills Centre (RGASC). RGASC offers workshops and individual consultations on math skills for calculus, critical reading & writing skills, scientific problem solving skills, time management, motivation, and other important skills.

If you have students with accessibility needs, refer them to AccessAbility office. Note that AccessAbility offers specialized Learning Strategy supports.

FURTHER READINGS


