RIT/PSY/TR–17/1
Final Technical Report

Jointly Offered Online Course Between Malmö University and Rochester Institute of Technology on Industrial and Organizational Psychology

By

Esa M. Rantanen and Rebecca Johnson, Rochester Institute of Technology, and
Jonas Lundsten, Jean-Charles Languilaire, and Andreas Sjöstedt, Malmö University

September 28, 2017

Department of Psychology
College of Liberal Arts
18 Lomb Memorial Drive
Rochester, New York 14623-2953

Technical Report Documentation Page

1. Report Title	2. Report No.
Joint Online Course Between Two Different Universities in Two Different Countries	RIT/PSY/TR-17/1
	3. Report Date September 28, 2017

4. Authors	5. Type of Report
Esa M. Rantanen, Rebecca Johnson, Jonas Lundsten, Jean-Charles Languilaire, and Andreas Sjöstedt	Final Technical Report

6. Performing Organization Name and Address	7. Performing Agency Code
Rochester Institute of Technology, Rochester NY and Malmö University, Sweden	NA

8. Sponsoring Organization Name and Address	9. Sponsoring Agency Code
NA	NA

10. Supplementary Notes
NA

11. Abstract

The idea of a jointly offered online course between Rochester Institute of Technology (RIT) and Malmö University (MU) on Industrial and Organizational (I/O) Psychology was first conceived at the 2nd Annual MU-RIT Symposium on Oct 1-3, 2014, in discussions between faculty members of RIT and MU. The symposium, held in Sweden at MU, provided an opportunity for faculty and administrators from RIT and MU to identify potential collaborative research and teaching partnerships between faculty from the two universities.

Two principal collaborators from each university began to develop a jointly offered course shortly after the symposium, based on an existing online course offered at RIT (PSYC 234 in RIT's designation). Course development for joint offering between RIT and MU was substantially aided by the Guided Online Learning Development (GOLD) professional development program offered at RIT in the spring of 2016.

The course ran in the summer of 2017 for 10 weeks. The course was designated at MU as OL 154N. This report describes the course design and presents a rationale for joint offering of the courses for students from both RIT and MU in the future, as part of the MU–RIT partnership, in the context of recent research on online teaching. Although what we describe is a case study of a single course in a specific setting, this experience with the design and delivery of a joint online course will offer several valuable "lessons learned" for similar endeavors in similar (i.e., international) settings. Current research literature on online education is reviewed and several specific recommendations are made.

DEPARTMENT OF PSYCHOLOGY, ROCHESTER INSTITUTE OF TECHNOLOGY, USA
FACULTY OF CULTURE AND SOCIETY, MALMÖ UNIVERSITY, SWEDEN

Jointly Offered Online Course Between Malmö University and Rochester Institute of Technology on Industrial and Organizational Psychology

by

Esa M. Rantanen and Rebecca Johnson, Rochester Institute of Technology, and
Jonas Lundsten, Jean-Charles Languilaire, and Andreas Sjöstedt, Malmö University

September 28, 2017

1 Background

The idea of a jointly offered online course between Rochester Institute of Technology (RIT) and Malmö University (MU) on Industrial and Organizational (I/O) Psychology was first conceived at the 2nd Annual MU-RIT Symposium on Oct 1-3, 2014, after discussions with colleagues at MU. The principal collaborators, Rantanen at RIT and Lundsten at MU, were ready to give the course (PSYC 234 in RIT's designation) a try in the following summer of 2015, but the course that semester was canceled by Rantanen's department at RIT (Department of Psychology in the College of Liberal Arts).

Rantanen kept working with Lundsten during the academic year 2015-2016 and participated in the Guided Online Learning Development (GOLD) professional development program offered at RIT in the spring of 2016 to redesign the course (with the help of Johnson) for joint offering between RIT and MU. The PSYC 234 course was offered during the summer semester, May 31—Aug. 5, 2016, with Rantanen and Lundsten acting as co-instructors. The total enrollment in the course was 21 students, all from RIT, for MU could not have a course rubric ready in time for their students to enroll in it.

Finally, in the summer of 2017 the course ran with MU students. The course was designated at MU as OL 154N. This white paper describes the course design and presents a rationale for continuing a joint offering of the course for students from both RIT and MU in the future, as part of the MU–RIT partnership. In this paper we also review our experiences from the past summer with the joint online course and make recommendations for the next time this course may be offered between RIT and MU.

2 Course Design

This is a survey course on I/O Psychology. The course content includes all the "standard" topics of history and development of the discipline; research methods; personnel selection, training, and performance assessment; management and leadership; motivation and job satisfaction; organizational factors; working conditions and worker health; and stress. In addition, a special emphasis on the course is on macroergonomics and safety, the latter examined through what are known as "organizational accidents". The course has been offered at RIT for many years. Rantanen has been teaching it both in-class and online since 2009 and developed the course to what it is now in terms

1

of its content and format. The syllabus from summer 2017 is in an appendix to this paper.

The course is organized around a weekly schedule. Each week is dedicated to one topic. The instructor-provided content each week includes a short (5-6 min.) video (mini-lecture), a handout, and a selected reading (a journal article or a book chapter). There is no textbook assigned to the course. The focus on the topic sharpens by each module, from a very broad introductory video mini-lecture to a comprehensive handout to a narrowly focused reading assignment. In addition, the instructor provides a specific prompt for an online discussion spanning the entire week. At the end of each week, the students take an online quiz on the week's topic.

In addition to the weekly structure described above, there is a special assignment spanning nearly the entire length of the course. The students are assigned into groups of about 5 students each and asked to collaborate on a term paper. The paper is a major assignment with a minimum length of 3,000 words. The students are typically given a "big" topic and tasked with identification of a narrower subtopic that could be examined in sufficient depth within the minimum length of the paper. To pull this assignment off, division of labor and careful organization of the work will be necessary, giving the students hands-on experience with most of the topics covered in the class. A final assignment asks the students to individually reflect on their teamwork experience relative to what they had learned in the course.

The discussions and quizzes are assessed individually after each week. The term paper is assessed separately so that all group members share the grade on the paper, but adjusted by the proportion each member contributed to the final paper as reported by all members of the group. The reflection of the teamwork experience is also assessed separately.

3 Evaluation of Joint Offering of the Course Between MU and RIT

Because the course is designed for and offered solely online, students may participate in it regardless of their geographic location and time zone. All interactions between the students and the instructors and among the students are asynchronous, that is, through an online course management system (myCourses at RIT). Therefore, the format allows for concurrent offering of the course for students at different universities in different countries. Furthermore, the general subject matter of the course, industrial and organizational psychology, is particularly well-suited for an international joint offering. This arrangement provides for unique opportunities for exploration of different historical and cultural influences in work systems between different countries (Sweden and the USA; many of the theories and practices in I/O Psychology were also "invented" in Scandinavia) and their evolution as well as current issues in globalization.

Despite the aforementioned, putative, benefits, the joint offering of the PSYC 234/OL 154N course in the summer of 2017 encountered several problems that prevented it from achieving its full potential to benefit the students taking it. These barriers to the designed success of the course are detailed below.

3.1 Instructors

The course was co-taught by three instructors, Rantanen from RIT and Languilaire and Sjöstedt from MU. Lundsten, who had developed the course with Rantanen over the past two years' time could not participate in the actual instruction due to family emergency. Sjöstedt stepped in to

replace Lundsten. The three instructors divided the topics between themselves so that each assumed leadership on three topics; all instructors participated in the discussions each week, encouraging the students to continue contributing to the discussion. The cooperation between the instructors worked very well, and most of the "behind the scenes" coordination was achieved by email.

3.2   Enrollment in the Course at RIT

The PSYC 234 course is an elective "breadth core course" (students choose 3 out of 10 such courses) in the Bachelor of Science (BS) in Psychology program at RIT. The course series of 200 means that RIT students nominally take it during the 2nd (Sophomore) year at the University. The course has been historically offered several times every year, with multiple sections, and both in a traditional in-class and online formats. Historically, the students taking the course have been 3rd and 4th year students at RIT.

Recently, RIT has enforced strict minimum enrollment to offer classes. Last spring, starting on April 24, all summer class enrollments were reviewed over a three-week period and underenrolled classes canceled each week. Final cancellations occurred on May 15, two weeks prior to the first day of summer classes. Despite the historically high demand for the PSYC 234 course, and despite much advertising (two direct emails were sent to student mailing lists in all 9 colleges of RIT), enrollment remained low with only 3 students enrolled by the cancellation deadline. Because of the joint offering of the course with MU, however, the course was allowed to run with a prorated compensation for the instructor (Rantanen). Of the three RIT students, one dropped the course without ever participating in it and another about half way through the course. The final RIT student later emailed Rantanen about her inability to keep up the work on the course, but as she never officially withdrew, she earned a failing grade in the end.

Because the preparation for the course takes a better part of a year (see the history of course development above) and considering the additional coordination demands between two separate universities, the uncertainty of whether the class may be canceled within a few weeks before it is scheduled to begin is a serious barrier to continuation of this initiative. To overcome this barrier, the supply (how often the course is offered) and demand, which remains high, should be better balanced by more thoughtful scheduling of the course throughout the year and better coordination between academic advisers and their supervisors in different academic programs at RIT.

3.3   Enrollment in the Course at MU

The enrollment procedures at MU were quite different from RIT. The following is based on Languilaire's explanation (via email on Jul 1, 2017, at 9:26 AM): Students apply for courses via a national (Sweden) website, from which a given number of students get selected for the course. The instructors had agreed to allow 30 students from MU in the class. The course appeared to generate much interest among Swedish students, evinced by the number of applicants to it reaching a total of 1,100 students (email from Lundsten on Mar 21, 2017, at 12:22 PM).

However, students in Sweden have to be active in taking a course to be enrolled in it. In a normal case, there would be a roll call when the course meets for the first time, and only students showing up would be registered for the course. Because this was an online course, students admitted to the course were sent emails reminding them to login to the myCourses site and post a brief introduction of themselves as a show of activity. Yet, despite the apparent interest in the course and

several direct emails to students enrolled in the course with myCourses accounts, the statistics as of Thursday morning of Week 1 were quite alarming: of 28 MU students, 9 (32%) had accessed the course website, 2 (7%) had posted their introduction and 0 had participated in the week's discussion.

During the first several weeks of the course, Rantanen sent several direct emails to the students in myCourses classlist. The Swedish instructors did the same. However, none of the "missing" students replied to these attempts to reach them. Much later in the course, after several weekly emails, a handful of Swedish students emailed back to Rantanen expressing surprise that they were enrolled in the course in the first place and that they never had any intention to take it. These students were removed from myCourses classlist, as were those who had not logged in during the first 5 weeks of the course. In the end, only 5 MU students participated in the course.

3.4   myCourses

Non-RIT account(s) for myCourses were created for the Swedish students and instructors by Teaching and Learning Services at RIT. Creation of such accounts carries a small fee, which the Associate Provost of International Education and Global Programs, Dr. James Myers, had generously agreed to cover. There were some initial problems in getting everybody to myCourses at the beginning of the course. The Swedish students were not provided with sufficiently detailed instructions, for example, that they should use the "Non RIT Account Login" button on the myCourses home page, but the active students soon figured myCourses out.

Other minor issues were caused by the different instructors uploading materials to different locations in myCourses (under different tabs), which momentarily confused the students. Also, the time restrictions on the materials in different locations were not synchronized. These kinds of "teething problems" are to be expected with a relatively complex and feature-rich system such as myCourses. The remedy is strict adherence to the best practices, which should be published and made available to novice users, and for instructors to refrain from making changes to the structure of the myCourses site while the course is running. Overall, however, myCourses turned out to be a successful platform for this experiment, and the Swedish instructors gave a very positive assessment of it for MU purposes.

3.5   Course Content and Format

It was apparent in this experiment (joint online course between RIT and MU), as has been the case historically with the course at RIT, that the required level of active involvement in the online version of the course comes as a surprise to the students. Despite detailed instructions and a grading rubric specifying the expectations for discussion posts, the first couple of weeks are always tentative. After that, a subset of students begin making very good and insightful contributions to the weekly discussions. However, the majority of students chose not to do even the minimum specified in the syllabus, making only one posting late in the week, and not participating in any *discussion* (i.e., *exchange* of ideas).

Also historically, students have been asking for longer videos. This desire was shared by Sjöstedt, who, with Languilaire, created additional PowerPoint files for the topics where he led the discussion. A counterargument is that video lectures and PowerPoint presentations blur the line between in-class and online course formats; the former would undermine the advantages of the online format, which requires and depends on much more initiative and activity from the students'

part that the traditional in-class format.

The readings selected for the class seemed appropriate. The MU instructors agreed with the topics, that risk, ergonomics, and leadership were all good, but more focus on employment interviews, employee selection, and training would be desirable. Review of the course content and updates to the topics and materials must be made an ongoing activity if this course is offered again. The active students exhibited no trouble understanding the readings and responding to them as instructed in the discussion prompts.

There were some reassignments to groups necessary because so many students originally assigned to groups did not "show up to work". This had some effect to the dynamics of the single group formed by all the active students, but in the end the group was able to complete the term paper assignment.

3.6 Student Performance

This is both the best and the worst outcome of this summer's course. The five MU students who in the end participated in the course were very good, better than any RIT students Rantanen had seen in his eight years of teaching the course. The fresh, new insights these students brought to the topics assigned for each week were a joy to read, and everyone who read them stood to gain much from their contributions. This is indeed how the course is *supposed* to work.

Alas, the above only applies to the students who participated in the course. As was mentioned above, the majority of students who were initially enrolled in the course never actually participated in it, or if they did at all, their participation fell well below the minimum expectations. That the expected activity may have come as a surprise to the students and led to the many withdrawals (at least in the case of the RIT students) probably bespeaks of the general passivity—or preference for passivity—of students both in the U.S. and in Sweden. Student passivity is not a new phenomenon, but the online format makes it much more conspicuous than when students are in a classroom environment.

3.7 Instructor Workload

It must be acknowledged that instructor workload in online teaching is higher than in traditional classroom teaching. Online teaching requires much more frequent interactions between the instructors and students than regularly scheduled in-class teaching, with 2–3 class sessions per week; online, the instructors must check on student contributions and intervene to direct and encourage further contributions at least daily, often several times a day.

It must also be acknowledged that team-teaching does not proportionally reduce (halve in case of two instructors) the workload per instructor. In case of a jointly offered course between two universities in particular, instructors from both universities should at all time remain active in the course. Furthermore, the necessary coordination between the instructors adds to the total workload.

4 Conclusions and Recommendations

The primary, planned advantage of an international, online course on I/O Psychology, that of exploration of different historical and cultural influences in work systems between different countries

and sampling of many global issues in I/O Psychology, was not realized due to lack of participation by students from the USA (i.e., RIT). This does not prove that such advantages are not real, or that they are not worth pursuing, however. The central conclusion that can be drawn from the experiences in the past summer is that jointly offered courses need better administration than just the course instructors can provide. Individual faculty members have little say in course scheduling in their universities and even less clout outside their own departments and programs. As I/O Psychology is a subject that would be beneficial to students in many different programs, this course should be promoted and its scheduling coordinated above individual department level, or even above individual college (RIT) or faculties (MU) level.

Promotion and further development of this course must also involve making sure it "counts" towards degrees in many different programs. This task, too, is beyond the instructors of this course and should be undertaken by university administrators with appropriate responsibilities and authority to address the issues detailed above.

The problems encountered in the summer 2017 were largely due to factors beyond the instructors' control. Nevertheless, for the three instructors and the five students participating in the course it was a success. What was demonstrated is that a joint online course offered across two different universities in two different countries is technically feasible, that the myCourses online course management system worked very well and was easily mastered by the students and instructor alike, and that the learning goals set for the course were largely met. To achieve the full potential of the course, should it be offered between RIT and MU again, we make several recommendations:

1. Scheduling and enrollment procedures at MU should be reviewed to avoid situations encountered last summer where students were apparently enrolled in the OL 154N course without their knowledge and against their will. The course should also be afforded a status that allows it to fulfill degree requirements in various programs at MU. The goal is to make the demand for the course highly predictable at least a year in advance.

2. Scheduling the course at RIT should be reviewed to better balance the supply and demand for it. The supply can be controlled by how often the course is offered. The demand can be controlled by more thoughtful scheduling of the course throughout the year and better coordination between academic advisers and their supervisors in different academic programs at RIT. The course should "count" towards degrees in programs other than BS in Psychology to entice students throughout RIT to take it. Here, too, the demand for the course in any given semester should be highly predictable.

3. Although the myCourses online course management system proved its suitability for jointly and internationally offered courses, several relatively small things would help make the platform even more usable. Specifically,

   (a) Publish simple "best practices" guidelines for instructors new to the system in terms of organization of the content and management of time-restricted activities;

   (b) Allow for synchronization of time restrictions across the platform, or create warnings for discrepancies in restrictions;

   (c) Allow "bulk editing" to make grading and giving feedback easier and to reduce the number of clicks and windows to be opened for each individual student;

(d) Automatically collect more interaction data. Now that RIT is enforcing a two-week deadline on returning any graded work, myCourses should make this kind of performance measurement as easy as possible. Simple output of time-stamped event logs for further analysis would be good start.

4. Although online courses have been around for a long time and they are actively promoted in some universities (e.g., RIT), they are still a novelty to many students (e.g., at MU). Given the experiences with the PSYC 234/OL 154N course last summer, more research is needed on best instructional practices on online platforms to maximize the potential of relevant technologies for best educational outcomes.

5. At least at RIT the heavy instructor workload associated with online teaching effectively precludes offering this course during normal fall or spring semesters, when the instructional faculty are busy with other classes and myriad service and research expectations. Summer scheduling allows instructors to focus solely on only one course and meet its increased demands on their time. Additionally, students usually have internships or are engaged in cooperative education during the summer months. Taking an (asynchronous) online class seldom interferes with employment, but the fact that students are immersed in work life while taking a class on I/O Psychology allows them to immediately observe in their jobs what they learn in the course and bring their work experiences as examples to be discussed in the class.

Despite the problems we encountered, our experiment with a jointly offered online course on I/O Psychology between MU and RIT unquestionably demonstrated the feasibility of such an endeavor. Most of the barriers described above are quite small and practical in nature. Better coordination and management of scheduling and enrollment in the course at both MU and RIT are not difficult to achieve. Further course development can be undertaken by the instructors, aided with the resources offered by Teaching and Learning Services, a unit of the Innovative Learning Institute (ILI) at RIT. We offer these experiences and recommendations as one way to advance the MU-RIT partnership for the benefit of students in both universities.

Respectfully submitted on September 28, 2017,

Esa M. Rantanen and Rebecca Johnson, Rochester Institute of Technology, and
Jonas Lundsten, Jean-Charles Languilaire, and Andreas Sjöstedt, Malmö University

Cc:
Kerstin Tham, Vice-Chancellor, MU
Per Hillbur, Deputy Vice-Chancellor, MU
Rebecka Lettevall, Dean, Faculty of Culture and Society, MU
David C. Munson Jr., President, RIT
Jeremy Haefner, Provost and the Senior Vice President, Academic Affairs. RIT
James Myers, Associate Provost of International Education and Global Programs, RIT
James Winebrake, Dean, College of Liberal Arts, RIT
Joseph Baschnagel, Chair, Department of Psychology, RIT

Appendices: PSYC 234 / OL 154N Syllabus, Discussion Prompts and Readings

DEPARTMENT OF PSYCHOLOGY, ROCHESTER INSTITUTE OF TECHNOLOGY, USA
FACULTY OF CULTURE AND SOCIETY, MALMÖ UNIVERSITY, SWEDEN

PSYC 234-01 / OL 154
INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY

SYLLABUS

PROFS. RANTANEN, LUNDSTEN, AND LANGUILAIRE

SUMMER SEMESTER 2017

May 29, 2017

This syllabus is subject to change during the semester. Please see myCourses for up-to-date information about course schedule, readings, and assignments.

1 Course Information

1.1 Meeting Time and Place

Online, `https://mycourses.rit.edu/`. Please see below for weekly activities.

1.2 Course Description

Industrial and organizational (I/O) psychology is a branch of applied psychology that is concerned with efficient management of an industrial labor force and especially with problems encountered by workers in a mechanized environment. Specific areas include job analysis, defining and measuring job performance, performance appraisal, tests, employment interviews, employee selection and training, and human factors. This course covers the basic principles of the above areas as well as applications of current research in I/O psychology from a unique perspective of work systems and the design of work systems to fit people within the organizations' sociotechnical system characteristics. Safety, safety culture, and mitigation of organizational accidents are emphasized throughout the course. (RIT prerequisite: PSYC-101 Introduction to Psychology) RIT Class 3, Credit 3

1.3 Instructor Information

Esa M. Rantanen, Ph.D.
Office: Eastman Hall (EAS)–2353.
Email: `esa.rantanen@rit.edu`

Jonas Lundsten, Ph.D.
Office: Nordenskiöldsgatan 1, NI
Email: `jonas.lundsten@mah.se`

Jean-Charles Languilaire, Ph.D.
Office: Nordenskiöldsgatan 1, NI: Plan 8, Hus C
Email: `jean-charles.languilaire@mah.se`

Note: Because this is an online course, the instructors do not keep regular office hours; you may reach us by email or through myCourses.

1.4 Course Text

We will not have an assigned textbook in this course. Instead, original articles will be assigned on most of the topics covered in this class. On some topics, there will be detailed handouts for the class. Please see myCourses website for reading assignments, PDF copies of the papers, and handouts.

1.5 Academic Accommodations

RIT is committed to providing academic adjustments to students with disabilities. If you would like to request adjustments due to a disability, please contact the Disability Services Office. It is located in the Student Alumni Union, Room 1150; the website is `www.rit.edu/dso`. After you receive adjustment approval, it is imperative that you contact me via email (`esa.rantanen@rit.edu`) so that we can work out whatever arrangement is necessary.

2 Learning Outcomes and Expectations

2.1 Learning Outcomes

At the end of this course, students should be able to:

1. Demonstrate the ability to think critically about theories and results in psychology by accurately and thoroughly interpreting evidence presented in readings and discussions, asking relevant questions, recognizing and fairly examining assumptions and alternative points of view, and justifying inferences and conclusions (discussions and quizzes);

2. Be able to search relevant literature, and succinctly summarize key results related to given topics in I/O psychology, demonstrated by references to credible and relevant sources in weekly discussions (discussions, term paper);

3. Demonstrate effective written communication skills by discussion posts that are free of grammatical and other errors (proofread before you post!), make a point clearly and plainly, and back it up with sound reasoning and references to credible sources (discussions, term paper);

4. Demonstrate an understanding of the behavior of individuals, small groups (teams), and organizations by referencing relevant course materials and giving illustrative examples in discussions and by reflecting on group processes in the term paper assignment (discussions, quizzes, term paper);

5. Demonstrate the ability to define a research problem, apply literature research methods and analysis, and communicate results to a broad audience (term paper).

For assessment of these learning outcomes see section 5 below.

2.2 Class Participation

Because this is an online course, class participation is the main expectation. Class participation will consist of frequent and substantial contributions to the weekly discussions (see section 5.1 for details). These contributions will be graded weekly. I encourage you to contribute early and often to facilitate real back-and-forth, give-and-take debates on what I hope will be interesting topics. There will also be several discussion topics for ongoing discussions of course-related issues and collaborative problem-solving.

Note: If you have creative ideas for other kinds of participation in an online course like this, I am open to consideration of your thoughtful suggestions!

2.3 Quizzes

There will be weekly quizzes on the assigned readings (handouts and original articles on different topics) and the materials covered in the discussions. This is to provide you with an incentive to keep up with the readings and discussions. The quizzes will be available for 72 hours, but once started, you will only have 1 hour to complete the quiz. Therefore, you should be familiar with the week's readings and materials presented in class as well as in online discussions before attempting a quiz.

2.4 Term Paper

This is the main deliverable for this course. The paper will be a group project and I will make group assignments based on your complementary skills and areas of expertise. The groups should be actively working on the papers by the third or fourth week of the course. Detailed instructions for the term paper will be posted in myCourses by the end of the second week of the course.

Note: Please view the term paper assignment also as a simulation of collaborative projects in the workplace; pay attention on how you organize your work, share responsibilities, communicate and coordinate activities, and resolve conflicts. In other words, *apply* what you are learning about I/O Psychology to this assignment. I will ask you to evaluate and reflect on your experiences in this assignment at the end of the course, after the final papers are due.

3 Course Schedule and Mechanics

This course will follow a strictly weekly schedule, with one major topic covered in each of the 10 weeks of the semester. Please see section 6 for the tentative topics to be discussed. There will also be weekly quizzes, and I will do my best to score your participation every week, too.

3.1 Weekly Discussion Schedule

Weekly discussion topics open on Sunday mornings (at 0000) and close on Saturdays at midnight (at 2400). I hope that this will allow for sufficient flexibility for you to participate in the course despite of your work schedule or other things you may be doing this summer. Your contributions to these discussions will be graded individually.

3.2 Weekly Quiz Schedule

Weekly quizzes become available to you on Thursday mornings (at 0000) and close at midnight on Saturday (at 2400). You may take the quiz at any time within this period. Once you start the quiz, you have 1 hour to complete it. Although the quizzes are (necessarily) open-book and you may use any available resources to answer the questions, it will not be possible to look up answers to the questions in the time available. Therefore, please make sure you have read all the assigned materials before attempting a quiz. Expect 1 or 2 open-ended questions in each quiz, requiring critical thinking of the topic covered in the week and integration of information from the readings, handouts, and discussions.

4 Academic Integrity (RIT)

The following academic integrity policy, adopted by the Department of Psychology in 2012 will be enforced:

Along with the Institute as a whole, the Department of Psychology is dedicated to ensuring that the highest standards of academic integrity are maintained by faculty and students. For students this means that:

1. any work they submit must be their own;

2. they cannot use or provide to others any assistance during exams;

3. the contributions of others are always cited in papers;

4. their work cannot be submitted to satisfy more than one academic assignment; and,

5. data reported must be in accord with their findings even when they do not support the hypothesis.

In a just academic environment, students are evaluated and appropriately rewarded or penalized on the basis of their own performance. It is unjust to try to improve one's performance by submitting someone else's work as one's own. This includes cheating on exams, copying from other students, and submitting papers that incorporate plagiarized material. Further, it is also unjust to improve another student's grade by providing unauthorized assistance. Students who observe or become aware of acts of academic dishonesty are encouraged to report these incidents to the course instructor or the Department Chair.

Faculty have the responsibility for monitoring student compliance with these expectations and will normally decide whether the offense merits receiving no credit for the contaminated assignment or further penalty. The course instructor alone decides whether the penalty will be a zero on the assignment or failure of the course. Faculty who uncover acts of academic dishonesty will report them to the Department Chair. The Department Chair is charged with keeping records to discern whether there is a recurring pattern of dishonesty. Repeated offenses or especially serious cases may result in student expulsion from the program and/or the Institute.

Students are expected to abide by the *Student Academic Integrity Policy* (D08.0) and the *Honor Code* (P03.0) of RIT and be familiar with the *Student Conduct Process* (D18.0). If you are not intimately familiar with these policies, please review them at

https://www.rit.edu/academicaffairs/policiesmanual/d080
https://www.rit.edu/academicaffairs/policiesmanual/p030
https://www.rit.edu/academicaffairs/policiesmanual/d180

5 Assessment

5.1 Weekly Discussions

The weekly discussions will be graded according to the criteria below for a max. of 20 points:

1. Contributions are directly relevant to the topic of the week and follow the instructions given (4 pts).

2. The posts make a substantial contribution to the discussion, i.e., introduce a new and original point of view to the topic at hand (4 pts).

3. References are made to weekly readings to demonstrate that you have read and understood them and to relate your posts to them (4 pts).

4. You support your contributions by evidence; that is, make sure you accurately reference all your sources (e.g., include links in your post for online sources) so that others may follow up on them. You should look up other references in addition to the assigned readings (3 pts). Note: Sharing personal experiences is essential to this course, but you should put them in the context by referencing assigned readings of other resources.

5. Discuss the topic, i.e., respond to your classmates' posts by asking questions about them or challenging what they have to say (3 pts).

6. Early participation will weigh favorably in your weekly discussion scores. Initial posts are due by Tuesday night of each week to allow others to respond and discuss them (2 pts).

   Note: You do not necessarily *have* to compose an original post to earn full credit for the week's discussion. You may use a classmate's post as a starting point and continue the discussion from there, per the above criteria. Obviously, someone has to be the first one to post, but I want to encourage true *discussion* of the issues in this course.

5.2 Quizzes

The quizzes will have open-ended questions. They will be graded according to the degree you relate your answers to the materials covered in the week (readings, handouts, discussions) and the level of critical thinking you demonstrate in your answers.

5.3 Term Paper

See the term paper instructions for grading criteria. All members in the group will receive the same grade for the paper, possibly adjusted by unequal contributions made by individual members.

5.4 Critical Thinking

You should actively practice your critical thinking skills in this course (see the first learning outcome!). As a consumer of information, always ask the following questions, and seek to answer them to the best of your ability in *all* assignments in this course:

1. **What am I being asked to believe or accept?** In the discussions, restate the question I or your classmates may be asking in your own words to make sure that you have understood it and to make it clear to others *how* you have understood it. If you are making an argument, clearly state what you are asking others to believe.

2. **What evidence is available to support this assertion?** Provide references to sources that support the argument (course readings and materials you look up yourself). If you are refuting an argument I or your classmates are making, reference sources that provide evidence *against* the argument. If I or your classmates fail to back up our points with evidence, make sure to *ask* for some!

3. **Are there alternative ways of interpreting the evidence?** If I or your classmates support an argument with evidence, think of other arguments or positions the same evidence might support just as well (and let us know what you think!)

4. **What additional evidence would help to evaluate the alternatives?** We will be dealing with several quite difficult topics in this course that may not have clear, straightforward answers. In such cases, please think of and suggest evidence that might help settle the case.

5. **What conclusions are most reasonable?** Be explicit about your *reasoning* that led you to your conclusion. Try to see the reasoning in my and your classmates' posts, and if the reasoning is not clear, ask about it.

Note: Please consider "evidence" very broadly. Almost anything can be put forth as evidence for one thing or another. Your own experiences may serve as *anecdotal* evidence, and I want to encourage you to share such evidence with the class at every opportunity as we make our way through the topics covered in this course.

5.5 Grading

Class participation (discussions)	30%
Quizzes and homework	30%
Term paper	40%
Total	100%

5.6 Letter Grade Distribution

The letter grade distribution reflects the new refined grading system (i.e., "plus/minus grading" scheme) adopted by RIT:

Percent Score	MU Ltr Grd	RIT Ltr Grd	RIT Pts toward GPA
93.00–100.0	Excellent	A	4.00
90.00–92.99	Excellent	A-	3.67
87.00–89.99	Very Good	B+	3.33
83.00–86.99	Very Good	B	3.00
80.00–82.99	Very Good	B-	2.67
77.00–79.99	Good	C+	2.33
73.00–76.99	Good	C	2.00
70.00–72.99	Good	C-	1.67
60.00–69.99	Satisfactory	D	1.00
< 60.00	Fail	F	0.00

5.7   Late Work

Given the very short 10-week course and the necessity to strictly maintain the weekly schedule, no late work will be accepted. The weekly schedule should allow for enough flexibility for you to plan your work. Please do so (i.e., plan your work). I also hope that the very regular class schedule will help you with your planning.

6   Tentative Course Schedule

The weekly coverage might change as it depends on the progress of the class. Please check the myCourses site for current reading and discussion assignments. The following lists the topics and reading assignments by each week of the course (May 31–August 5):

Wk	Topic	Lead
1	Introductions, student and I/O Psychology	Rantanen, Lundsten, Languilaire
2	Macroergonomics and research methods	Rantanen
3	Selection, training, and performance measurement	Languilaire
4	Management and leadership	Languilaire
5	Motivation and job satisfaction	Lundsten
6	Organizational factors	Lundsten
7	Working conditions, workplace safety	Lundsten
8	Stress and workload	Languilaire
9	Organizational accidents	Rantanen
10	Safety culture	Rantanen

Department of Psychology, Rochester Institute of Technology, USA

Faculty of Culture and Society, Malmö University, Sweden

PSYC 234-01 / OL 154
Industrial and Organizational Psychology
DISCUSSION PROMPTS AND READINGS
Profs. Rantanen, Lundsten, and Languilaire

Summer Semester 2017

May 29, 2017

The section numbering refers to the weeks in the summer semester.
Readings assigned for each week are in the reference list in the end.

1   Work Experience

(Leader: Rantanen). Please read the Koppes chapter [1] and provide a brief description of a work environment you are very familiar with (e.g., a job you have once held or have right now). Relate any work experiences you have to this chapter, that is, I would like to gauge your familiarity (or unfamiliarity) with the concepts of I/O psychology. I will be asking you to relate future discussions, too, to your personal experiences, so spend some time thinking about this. This is also a way for me to ensure that the materials I present will be relevant to you individually and that you can make sense of the concepts on a personal level.

A special assignment for the first week in this class: There has been quite a a bit of public discussion about a gap between college students' education and the expectations of their potential employers (see here and here for examples). With respect to your work experience (see above) and your career plans, please reflect on your educational experiences at RIT and MU, and write about how well you think your education is preparing you for your prospective career. This is a great opportunity for you to be critical about your university, so please do not hold anything back. However, please also be constructive in your criticism and make suggestions to us about how your education and preparation for gainful employment couled be improved. We will do our best to incorporate as many of your suggestions into this course as possible!

2   Macroergonomics

(Leader: Rantanen). Consider the work environment you discussed in the previous (Week 1) assignment. Now describe some aspect of that job that is of particular interest to you (perhaps per the readings this [2] and last week). Then read the Handout #2, and describe how you would go about researching the problem (i.e., how could you find out what you want to know about your particular topic).

In particular, carefully and operationally define the independent and dependent variables of interest (please see Handout #2 for definitions and explanations) and describe some practical way

of performing the research (hint: This is not an easy assignment!). Please ask questions in this discussion forum if you cannot figure out how to proceed, and feel free to help others with their problems. I will try to jump in, too, and answer your questions individually and collectively.

3   Job Analysis and Performance Assessment

(Leader: Languilaire). This week the topic is large but really interesting too. To help, you find a PowerPoint presentation with sound that will give you basis about job analysis and performance management. You also have the handouts with key concepts as well as two articles from Harvard Business Review [3, 4]. To stimulate the discussion, I started several threads with questions where you will be able to join in order to share experiences, ideas and comments. Be as active as you can and add as much value to the discussions as you can. Develop new threads as you want! At the end of the week, you will get a quiz.

- Who is evaluating you? Is that the most relevant choice? Why? Any alternatives?

- What are the methods you have been evaluated with? Are they relevant? Why? Do you have any alternatives?

- Developing a thriving workforce is essential for tomorrow's society; share all ideas that are emerging from your reading of the article on "sustainable performance".

- Are you a Millennial? Do you recognize yourself as a Millennial? Are you managing Millennials? Do you recognize them? Share all ideas that are emerging

4   Management and Leadership

(Leader: Languilaire). This week, you have one handout as text and one handout as PowerPoint (no sound). In the PowerPoint, you will see several questions (in black boxes) that can be used this week for you to start threads. You also have several videos that are stored in YouTube that can also feed you for reflection. In total there is max. 45 min. of selected video. I want also in the discussion you to take up scientific articles on leadership but also "non-scientific" sources of leadership and reflect on them too. You can look at YouTube, you can look in normal press. I would love to hear your personal experiences about leadership and management as managers/leaders/subordinates/followers.

- How do charismatic and transformational leadership styles go or do not go together?

- Three behaviors are often described: people-orientated behaviors, task-oriented behaviors and change-oriented behaviors. Are there other behaviors? Maybe you could look in "behaviors to handle internationalization", "behaviors to handle digitalization", and "behaviors to handle flexibility and complexity in the modern world"? You may also look if there are "common" behaviors to all leaders in the world? For example, have a look at the GLOBE project research.

- You pointed at humility and servant, but there is also a new idea in the concept of "authenticity"; how are all three connected? You may look close at the special issue (June 2005) on authentic leadership in The Leadership Quarterly, 16(3) [5].

- Are there different leadership style for men and women? Are there differences in leadership effectiveness between men and women?

5 Motivation and Job Satisfaction

(Leader: Sjöstedt). This week's topic is about motivation and job-satisfaction. You have two handouts this week. One PowerPoint (no sound) which goes through this week's topic. There is also a PDF handout with description of common terms and concepts. Also review the handout on research methods from Week 2 to enrich this week's discussion. This week's first 3 discussion prompts are courtesy of Prof. Lundsten, who also suggested the Güntert [6] paper for you to read.

- There are weaknesses and strengths in most published studies. Discuss the strengths and weaknesses of the method used in Güntert (2015).

- Consider the independent variables mentioned in Güntert (2015) and give a concrete example (could be from your own experience) of how to increase job satisfaction, turnover intention, and OCB in an organization.

- Please discuss how we can use the research results described in the article to improve working conditions in general terms.

I would also like to encourage you to read the optional article by Huang and Van De Vliert (2003) [7], or seek articles out yourself, that problematizes the one-fit-all solution to motivation and job-satisfaction. I have also added an article by Gagné and Deci (2005) [8] if you want to go further in your discussions about self-determination theory. As in earlier weeks, the main participants of the discussions are you! Please help each other and participate in one another's inquiries. Starting your own threads and answering to others' are both important parts of this course.

6 Organizational Factors

(Leader: Sjöstedt). As we have passed the midpoint in the summer semester and enter Week 6 in the course, we also will tackle new challenges. In addition to the now familiar weekly tasks of online discussions and quizzes, I also expect you to be actively working on your term papers and experiencing and experimenting with everything you have learned in this course within your groups, and bringing up your experiences in the online discussions in different forums.

As I hope you have already seen, this course does not consist of 10 separate topic to be discussed in 10 weeks, but all the materials presented are part of a larger whole. Therefore, I expect to see evidence of you integrating material from all of our videos, PowerPoints, handouts, readings, and the discussions across the entire course in a holistic manner. This is quite a challenge, and I hope you take it seriously.

This week's reading is just as the last week one embedded PowerPoint, one handout with key concepts, and one paper. The Weick (1987) [9] paper, is a seminal one, and it introduces several very novel (still!) and controversial ideas. Because of the breadth and depth of the Weick (1987) paper, I will ask you to individually choose one or more ideas from it to discuss. As always, if you can illustrate any of Weick's ideas by your own, personal, experiences in the workplace, that would be great.

This week I will not create any topics, but I leave it up to you to start your own topics and join in on the others! Also remember to accurately referencing your sources when discussing. I will participate in the discussion on Tuesday as earliest.

7 Working Conditions and Safety

(Leaders: Languilaire and Sjöstedt). Several discussion threads:

- What do "working conditions and safety" mean for you, from your perspective? What are the working conditions that you think are central for developing a sustainable work?

- Do Swedes take security for granted? Are we not overprotected? If we are so well protected, why do we still have work accidents? Why do we still have so much work-stress and high levels of absenteeism due to health reasons? Please use references, connect with ILO, and look at arbetsmiljöverket at `https://www.av.se`.

- How are the "physical working conditions" today? What about the new "hazards" in modern office/buildings? What about people suffering indeed from back pain and shoulder pain due poor ergonomics? Are indeed office jobs less subject to risk, do they have less hazard or different hazards? One element that is central to think when talking of safety is the difference between hazard and risk. The hazard is the potential danger that is owned into the conditions. The risk is when this hazard is not controlled. For example, you have knifes in your kitchen, this is a hazard for kids. The risk will be when knifes are not properly stored. At work, for example, is there any hazard in an elevator; yes to get hands in the door; how is that controlled? By having a sound or a voice telling "door closing". Or having sign showing the hazard (maybe you saw such sign in underground doors). How should organizations prevent risks so that one can feel "safe"? Please look at your physical environment, identify the hazard and the risk in your physical working environment and tell us how it is "managed" by your organization.

- In relation to the organization and humans there where many thoughts regarding recognizing the human in work. Both the worker, as Josefina wrote: "be socially integrated, socially accepted, gender equality, being respected for who you are," but also giving space for the human in the receiving end of the organization, such as Mari's example of being a nurse in Sweden where: "Patient-focused, holistic nursing work has turned into task-focused work." I don't think hers is the only observation of a trend where a focus on reflectivity have cost us the human dimension, affecting both clients but also those working in the industry. Also humans-to-humans, or as Adam wrote "the social environment" is an important part in our working condition. Especially if we move from short term profit to long term for developing a "sustainable work", borrowing a term from Elis. Here I would like you to discuss anything related to the perspective of the human at work and its impact on our working conditions. Why: Is how we value the human-factor a cultural phenomenon (e.g. valuing the human equation less than profit?), or is it a perceived problem, or anything else etc.. And why is it relevant for working conditions? Is this an objective problem on the material level, or a more subjective, perceived working condition problem? And *is* it a problem in the long run?

- One sub-topic of the social and social-justice perspective of humans at work is fairness and organizational justice. Here Cropanzano [10] has done a lot of research. There are many more articles online on this, often divided into three types of justice: distributive, procedural, and interactional justice. Another thing you can look at is the "psychosocial work environment". Or something which is a problem only in certain sectors, and is it okay that some sectors have tougher schedule? Mari wrote about working at hospitals in Sweden: "For nurses in Gothenburg, the work time in major hospitals is based on rotating between day-, evening- or night-time shifts. An evening shift can end at 9:30 PM and the day shift starts at 06:45 AM

the following morning. Due to lack of workers as described in the paragraph above, this is a common occurrence." Please discuss here your thoughts about working hours.

8   Stress and Workload

(Leader: Languilaire). What is stress today in EU? What are the stress factors today in EU, is there new factors, is there surprising, how do these factors relates to sustainable workforce? How are these factors impacting workload and then stress based on stress models? How can we develop healthy relationships today? What I want you to do is to use the Summary of the report of the European Union on working conditions [11] and analyse it based on the models and concepts provided in the power-point and the book chapter. Note that the EU report already recognise that "two models are particularly in entail in this regard: the 'demandÐcontrol model' of occupational stress (Karasek, 1979; Karasek and Theorell 1992) and the 'effortÐreward imbalance model' (Siegriest, 1996)" (Report, page 47).

I do not want you to have "new models" or extra references, but really to analyse the material using the models presented. You may however look on the web for more details on the models presented, even if lots is on the platform, and you also have references at the end of the power point.

Let me as researcher give also my reading of the report and of the stress literature. Indeed, since 1980s there is a lots of focus on stress and stress management but a growing aspect of this research has spread on the meaning of work for life and the interface between work and other part of one's life. This is what has been coined in the 1990 as work-family conflict as source of stress and a source of bad health (Frone, Russell, Cooper, 1992) [12].

In the EU latest report this is called "working and non-working", in my research [13] and more of my colleagues calls it work/non-work or work-life management. I would love you to read more in the EU report about that aspect and we could talk more about how stress and workload affect the functioning of people's life. I can share with you already a small reading (in Swedish), attached!

9   Organizational Accidents

(Leader: Rantanen). I hope my personal belief about accidents became clear in my brief video-lecture: I do not think that accidents are "normal" (cf. Perrow, 1984), or unavoidable, but that zero-accident operations are in fact entirely feasible. However, such zero-accident operations will require constant attention to innumerable details. In a nutshell, safety is not a product that can ever be achieved, but an ongoing process requiring constant vigilance.

What do you think? Again, please try on a manager's hat and discuss what you would do to avoid accidents in an organization you are familiar with. Please provide many examples of potential latent failures (or perhaps ones that have already been manifested), defenses, performance variability and how it may help avoid accidents as well as cause them, and examples of skill-, rule-, and knowledge-based errors. Finally, discuss whether your example organization could be considered a high reliability organization, or what would be required to make it such.

10 Safety Culture

This is our last topic in this course, and this summer! Therefore, I am asking you to treat it with special reverence. This last week's discussion really should be a culmination of everything you have learned in this course, and I think that the topic, safety culture, offers many opportunities to integrate material from the earlier topics and draw conclusions. Make sure you reference past readings, handouts, videos, discussions, and other materials accurately in your posts.

Additionally, I ask you to think about and discuss safety culture in terms of formal models. Guldenmund (2000) [14] reviewed many such models and discussed their relative merits in the paper I assigned for you this week. Please consider any one of the models reviewed in the paper and see if you can apply it to some workplace you are familiar with, or that your classmates may have discussed. In other words, examine some real-world data that you have observed yourselves, see how they may fit any of the models Guldenmund (2000) reviewed, and then assess how accurately the model may represent the reality you are familiar with.

One more thing: Some, but not all of you have experience from workplaces where you may have risked life and limb. Those of you who do not have experience from truly dangerous work environments should think of safety in broader terms, for example overall quality of the products (which may be a safety issue to the end user), or in long term, for example long term health effects of sedentary work or exposure to poor quality air or noise.

References

[1] L. L. Koppes. Industrial-organizational psychology. In D. K. Freedheim and I. B. Weiner, editors, *Handbook of Psychology: History of Psychology*, volume 1, pages 367–389. Wiley, 2003.

[2] B. M. Kleiner. Macroergonomics: analysis and design of work systems. *Applied Ergonomics*, 37(1):81–89, 2006.

[3] H. Bresman. What millennials want from work, charted across the world. *Harvard Business Review*, February 2015.

[4] G. Spreitzer and C. Porath. Creating sustainable performance. *Harvard Business Review*, 90(1):92–99, 2012.

[5] B. J. Avolio and W. L. Gardner. Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, 16(3):315–338, 2005.

[6] S. T. Güntert. The impact of work design, autonomy support, and strategy on employee outcomes: A differentiated perspective on self-determination at work. *Motivation and Emotion*, 39(1):74–87, 2015.

[7] X. Huang and E. Van de Vliert. Where intrinsic job satisfaction fails to work: National moderators of intrinsic motivation. *Journal of Organizational Behavior*, 24(2):159–179, 2003.

[8] M. Gagné and E. L. Deci. Self-determination theory and work motivation. *Journal of Organizational behavior*, 26(4):331–362, 2005.

[9] K. E. Weick. Organizational culture as a source of high reliability. *California Management Review*, 29(2):112–127, 1987.

[10] R. Cropanzano, editor. *Justice in the workplace*. Lawrence Erlbaum Associates, 2001.

[11] Eurofound. *Sixth European Working Conditions Survey – Overview report*. Publications Office of the European Union, Luxembourg, 2016.

[12] M. R. Frone, M. Russell, and M. L. Cooper. Antecedents and outcomes of work-family conflict: testing a model of the work-family interface. *Journal of Applied Psychology*, 77(1):65, 1992.

[13] J-C. Languilaire. *Experiencing work/non-work: Theorising individuals' process of integrating and segmenting work, family, social and private*. PhD thesis, Jönköping International Business School, 2009.

[14] F. W. Guldenmund. The nature of safety culture: A review of theory and research. *Safety Science*, 34(1):215–257, 2000.