**PSYC 400 - Applied Research in Higher Education**

(This course is closely modeled after one developed by Dr. Joseph Kim at McMaster University)

**Professor:** Jill Atkinson, PhD  
Class hours: Wed 3:30-5:30 and Fri 8:30-1030 HUM 131  
On the web at: http://OnQ.queensu.ca

**Office hours:** By email appointment  
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**Course description**

The goal of this course is to introduce senior undergraduate students to the scholarship and practice of teaching. In this course, we will explore what it means to be a scholarly teacher, how pedagogy research informs educational practice, and how people effectively learn complex information. The theoretical elements will be explored through journal readings, critiques, small group and class wide discussions. The practical elements of the course will include delivering mini workshops and weekly teaching practica.

The presentation and group facilitation skills gained in class as well as the teaching skills honed through weekly teaching practica will not only benefit students in consolidating their own understanding of applied educational psychology and psychology in general, but will also provide them with practical skills and experience that will benefit them in future coursework as well as in volunteer and paid employment. A high level of active participation, reading, writing and constructive peer feedback is critical to success in the theoretical and practical components of this course. Upon successful completion of PSYC 400, students will be eligible to apply for a position as a TA in PSYC 100B during the winter term.

**Course Outcomes**

By the end of this course, students will be able to:

**Knowledge/Understanding**
- Critically evaluate applied educational research
- Explain how people learn complex information
- Identify and describe effective teaching strategies
- Plan and/or evaluate course redesign

**Teaching Skills**
- Work with the instructor and their peers to facilitate and evaluate learning sessions for undergraduate students.
- Demonstrate competency in active teaching strategies

**Learning/Reflective Skills**
- Self-assess teaching skills critically in congruence with others’ assessment
- Learn with, and enhance the learning of, others through active involvement and by providing constructive feedback to their peers in a nonjudgmental manner.
- Accept feedback professionally
Course format
The first 2 hour seminar each week will be made up of two components: student facilitated discussions of educational research based upon journal readings, and instructional strategy ‘mini-workshops’ and the second session will be devoted to learning lab debriefing (8:30-9:00) followed by planning with all the facilitators (9:00-10:30).

There will be no lectures; instead you will be responsible for learning the material by completing readings on your own and then discussing them in class. In addition, you will participate in a Teaching Triangle to observe and provide feedback to two partners and to learn from their feedback.

Readings
A list of readings and resources is posted on OnQ. You must complete the assigned readings before class each week and bring annotated bibliographies with you to class. On certain weeks, you will be assigned the role of facilitator and submit questions and prompts that demonstrate how you will ensure that your group makes applications, connections and extensions between and among the research discussed and their own teaching and learning experience.

Evaluation

Knowledge 50%
Journal Readings (biblios and facilitation) 25%
Research Proposal 25%

Application/Teaching Skills 40%
Learning Lab project 15%
Instructional Strategy ‘mini workshop’ 15%
Teaching Triangle 10%

Participation/Reflective Skills 10%
Peer Evaluation 5%
Instructor and Self Evaluation 5%

If you miss any component of the assessment, please provide an appropriate reason IN ADVANCE and we will discuss the need for documentation.

Academic Integrity
It is important for all of us to promote academic integrity at Queen’s. This is achieved by coming prepared to class, contributing your ideas, treating your classmates with respect, and submitting only your own work. In return, I will do my best to provide an interesting and challenging course and to provide the support necessary for you to fully understand the material and prepare for your learning labs. Any lapse of academic integrity is taken very seriously. These may include any act or failure to act in a way that may result in unearned academic credit or advantage, such as plagiarism and improper collaboration. Departures from academic integrity can result in penalties such as a grade of 0 on the assignment or in the course, and may become part of your permanent record. Please take time to read Regulation 1 regarding Academic Integrity in the Arts & Science calendar. You are responsible for abiding by this, and the remaining regulations, in the calendar.
### Topics

(The reading list is posted on OnQ with links to the articles)

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction, orientation to teaching practicum (Review expectations)</td>
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<tr>
<td>2</td>
<td>Situating the scholarship of teaching and learning (Design a research study)</td>
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<td>3</td>
<td>Cognitive models of Learning (Complete assignment sign up)</td>
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<td>4</td>
<td>Cognitive models of Learning (Discuss developing a Teaching Statement)</td>
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<td>5</td>
<td>Can we improve lectures? (Workshop on Peer Instruction)</td>
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<td>6</td>
<td>Small group learning (Workshop on Team Based Learning)</td>
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<td>7</td>
<td>Learning Styles (Workshop on Case Based and Problem Based Learning)</td>
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<td>8</td>
<td>On line learning/Instructional Design - best practices (Community Service Learning)</td>
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<td>9</td>
<td>Assessment (Universal Design for Learning)</td>
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<td>10</td>
<td>Designing a curriculum (Inquiry Learning)</td>
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<tr>
<td>11</td>
<td>The Open Classroom Debate (Workshop TBD)</td>
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<td>12</td>
<td>Review and reflection</td>
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*If you must miss a class, please let your group know in advance and send them your work.*

### Evaluation Details

1. **Participation (10%)**

Active participation is essential to your success in this course. By the end of Week 5 (Oct. 14th), you will be asked to submit a self-evaluation, as well as an evaluation of the participation of the other members of your team using an online form. You will be assigned an interim formative grade and a final summative grade - the interim grade is to provide you with feedback and will not count, whereas the final grade will contribute to your overall mark.
2. **Journal Readings (25%)**

i) **Annotated bibliographic references (20%)**

During 8/10 weeks, you must bring annotated bibliographic references for all the readings. Please visit [http://www.lib.sfu.ca/help/writing/annotated-bibliography](http://www.lib.sfu.ca/help/writing/annotated-bibliography) for information on how to write an annotated bibliography.

ii) **Discussion Facilitator (5%)**

During 2/10 weeks, instead of annotated biblios, you will act as a Discussion Facilitator. Your duty as a Discussion Facilitator is to ensure an overview of the key points of the articles, ample opportunity for group members to make connections between articles, and to apply the research to their understanding of teaching and learning. You will do this by:

- facilitating the discussion of the assigned articles by providing questions, prompts, etc. as needed to get group members actively involved (30 mins).
- with the other group facilitators, leading a final class-wide discussion, summarizing and comparing the different group discussions (10 min)
- As a Facilitator, you must hand in your prepared discussion questions, prompts and/or connections (half a page) at the end of class.

3. **Learning Lab Project (15%)**

Once during the term you will complete a Learning Lab project, which requires you to critically review different aspects of the PSYC 100 Learning Labs. The goals of this project are to increase the teaching effectiveness of you and your classmates, and to encourage you to apply the content of the PSYC 400 course to your Learning Labs.

During the week following one of the Learning Labs, you must submit an individual written report reflecting on the learning lab. This report will have two components:

1) **Report the descriptive statistics from your student evaluations, and reflect on the learning lab you presented.** Include a reflection on both your personal performance during the lab (things you did well, things you will strive to improve), and on the content of, and preparation for, the learning lab given to you (things we did well, things we should strive to improve). This section should be approximately 2 pages.

2) **Apply the concepts we are discussing in PSYC 400 to the Learning Lab you are evaluating.** For example, you might analyze the cognitive load aspect of the lab, whether groups were formed effectively, or the degree of active learning taking place, etc. Note that you are meant to analyze the lab content itself (the lesson plan, the activities, etc.) and not your personal presentation. The journal articles on our reading list should provide enough context for your analysis, but you may choose to perform a small amount of additional research if necessary. This section should be approx. 2 pages.
PSYC100 Learning Lab Evaluation

Our PSYC 100 facilitators complete a special seminar course, PSYC 400: Applied Research in Higher Education, which emphasizes the science of teaching and learning, and the development of lifelong teaching skills. We ask that you complete this short survey evaluating the PSYC 100 Learning lab that you attended today. The results of this survey are anonymous, and will be used only within PSYC 400 to improve the quality of our course and TAs.

**Note:** Please complete this evaluation considering today’s learning lab only. Please separately evaluate the **content** of the lab (the information presented, the activities) and the **presentation** of the lab (your facilitator’s clarity, delivery style, enthusiasm, etc.)

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<tr>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
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Evaluate the tutorial **CONTENT**

1. The learning lab focused on important course topics.
   1 2 3 4 5 6 7

2. The learning lab presented material in a new way to aid my understanding.
   1 2 3 4 5 6 7

3. Working in a group with my peers helped me learn the concepts.
   1 2 3 4 5 6 7

4. The learning activities were enjoyable.
   1 2 3 4 5 6 7

5. The learning activities (discussions, etc.) helped me understand the content.
   1 2 3 4 5 6 7

6. **Overall, the content of this learning lab was a valuable educational resource for me.**
   1 2 3 4 5 6 7

Evaluate the tutorial **PRESENTATION**

7. My facilitator seemed well prepared for the lab.
   1 2 3 4 5 6 7

8. My facilitator seemed knowledgeable about the learning lab content.
   1 2 3 4 5 6 7

9. My facilitator presented information clearly to the class.
   1 2 3 4 5 6 7

10. My facilitator was engaging and able to keep the class interested.
    1 2 3 4 5 6 7

11. My facilitator had a positive attitude and rapport with the class.
    1 2 3 4 5 6 7

12. **Overall, during this learning lab my facilitator was a valuable educational resource for me.**
    1 2 3 4 5 6 7

**Written Comments**
Please provide comments below and on the reverse on the lab content, presentation, or both.
4. **Teaching Triangle (10%)**

The goal of this component is to improve teaching through structured, non-evaluative classroom observation from your peers and reflection through self-evaluation. This base will be used to develop your personal Statement of Teaching Philosophy, which is a standard part of a Teaching Dossier. This project involves practical and written parts.

**Practical: A Teaching Triangle consists of 3 members who:**

- observe one full learning lab (ideally the same one) taught by each of your two partners
- as Observer, objectively record class experience and completes the Worksheet
- after you host an Observer, prepare your own reflection by completing the Worksheet
- share feedback and reflections with partners

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<tr>
<th>Week</th>
<th>Activity</th>
<th>Task</th>
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<tbody>
<tr>
<td>6-7</td>
<td>Initial Meeting</td>
<td>Make arrangements for class visits.</td>
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<tr>
<td>7-8</td>
<td>LL Visit 1</td>
<td>Visit each of your partner’s LL’s once. As the Observer, carefully observe and record the events of the class. Send a copy of your written feedback prepared from your recorded observations to your partners by Friday that week. When your LL is being observed, prepare a written reflection on your independent view of how the session went.</td>
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<td></td>
<td>LL Visit 2</td>
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<tr>
<td>8-9</td>
<td>Reflection and final meeting</td>
<td>Reflect on these reports along with your own self-reflections as you prepare for your Final Meeting. Share your personal observations with your partners.</td>
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<tr>
<td>9-10</td>
<td>Written Report</td>
<td>Your final report is due the following Wednesday in class</td>
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**Written Report: Personal Statement of Teaching Philosophy**

Every instructor starts with an initial theory of teaching and learning, based on personal experiences as a learner and, in some cases, reading or training. In reflective practice, the teacher applies this theory in classroom practice, observes and reflects on the results, and adapts the theory. The classroom becomes a kind of laboratory where the teacher can relate teaching theory to teaching practice.

The theory provides a unifying rationale for the activities that the instructor uses in the classroom; classroom observation and reflection enable the instructor to refine the theory and adjust teaching practice. Concepts that the teacher acquires through reading and professional development are absorbed into the theory and tested in the reflective practice cycle. This cycle of theory building, practice and reflection continues throughout a teacher’s career, as the teacher evaluates new experiences and tests new or adapted theories against them.

The Teaching Triangle practicum will give you specific feedback on your daily teaching. In your final report, you will take a broader view and submit a 3-4 page statement of your Teaching Philosophy. Teaching Philosophies will be discussed in class in week 3 or 4 and links to resources (example teaching philosophies) provided on Moodle.
Teaching Triangle Worksheet

1. Was proper context provided for the material covered in the Learning Lab?

2. Was the purpose of the activities conveyed well to the students? Were the instructions clear?

3. How did students collaborate during different parts of the lab?

4. Who asked questions? Who provided answers?

5. When did students ask for help? What kind of help did they request? How was it provided?

6. How was the overall rapport between students and the facilitator?

7. Final Comments. (Feel free to use other side)

The facilitator talked ______ percent of the time. Individual students spoke ______ percent of the time. Students talked with one another ______ percent of the time.

Were the percentages listed appropriate?

1. This facilitator’s teaching method is teacher centered in these ways:

2. This facilitator’s teaching method is learner centered in these ways:
5. **Instructional Strategy workshop (15%)**

In groups of 3 or 4, you will investigate one of the following instructional strategies
- Peer Instruction
- Team Based Learning
- Problem Based Learning
- Community Service Learning
- Inquiry Learning
- Universal Design for Learning
- TBD

Your group will present a 45 minute workshop for the class. Your presentation should help the class understand the principles upon which the instructional approach is based, how it works (demo or videotape), and whether, and in which situations, it is effective. You are encouraged to interview someone who uses this type of teaching at Queen’s and, if possible, to observe it in action. Prepare a brief (2 page) handout for the class summarizing the main points along with 2 or 3 references. Send your references to jill.atkinson@queensu.ca two weeks before your workshop and then book an appointment to meet with me the week before your workshop to review your teaching plan.

6. **Research Proposal (25%)**

The goal of this project is to give you practice with innovative thinking, extensive literature searches, designing scientific experiments, and communicating ideas in writing in the context of pedagogy research. Each of you will prepare a research proposal. The specific topic of the proposal is up to you; start by brainstorming to define a problem or question that is both interesting and important and conduct a preliminary background literature search to see what, if anything, is known about this problem. You must have your final topic approved by the instructor before proceeding and no later than Nov. 18th.

For your final report, you will synthesize literature pertinent to the question(s) developed, construct null and alternative hypotheses, design specific studies to test each hypothesis, and prepare a proposal outlining the rationale for the study, the specific experiments that address each question posed, and the broader anticipated significance of the research. Proposals must be no longer than 12 pages (double spaced), excluding figures, references and any appendices and are due in December (TBD).