POSITION SUMMARY
QUEEN’S UNIVERSITY - GENERAL STAFF

POSITION TITLE: Program Associate
DEPARTMENT: Mathematics and Statistics
POSITION NUMBER: 00502354
GRADE: 7
EFFECTIVE DATE: September 5, 2019

JOB SUMMARY:
Reporting to the Department Manager, the Program Associate (Associate) coordinates the involvement of the Mathematics and Engineering program in the courses APSC 100 and APSC 200/293 offered by the Faculty of Engineering and Applied Science, and the day-to-day running of MTHE 494 and of the project courses MTHE 393 and MTHE 493 offered by the Department of Mathematics and Statistics.

The Associate also assists in managing and long term planning of the learning experience for the students in the Mathematics and Engineering program, on behalf of the Department of Mathematics and Statistics. In addition, the Program Associate is responsible for supervising the Teaching Assistants and lab facilitators, and ensures consistency in the quality of the educational experience among the above named APSC and MTHE learning labs and assessments.

The schedule for this position may require the Associate to work some evenings or occasional weekends to attend tutorial sessions.

KEY RESPONSIBILITIES:
• Reviews course learning objectives, and ensures that assessment and instructional activities (on line materials, text, quizzes, lectures and labs) are well aligned with the learning objectives as set by the department. This review is completed in consultation with the Mathematics and Engineering Chair and course instructors.
• Provides work direction and suitable guidance to Teaching Assistants and Lab Facilitators. Schedules and assigns work, and oversees its completion. Coordinates and monitors work flow.
• Manages and maintains a central database of the course materials (checklists, quizzes, lab guides, rubrics and exam bank). Ensures course effectiveness by monitoring and reporting on the validity and reliability of all assessments (item analysis and intergrade reliability checks as well as correlations between assessment components). Identifies and recommends opportunities to improve course effectiveness to the course coordinator, and manages or assists in the implementation of approved changes.
• Ensures a smooth learning experience for students: Collects, analyzes, monitors, and reports on student expectations and satisfaction. Adjusts communication strategies as needed. Monitors and liaises as needed with instructors to ensure that course materials are revised, posted on time, accurate and reliable. Identifies and recommends course improvements to the course coordinator. Manages or assists with the implementation of approved changes.
• Assists faculty with sustaining laboratory course content for Mathematics and Engineering courses.
• Acts as a resource for APSC and MTHE students, and provides advice and support including the identification of at risk students, provision of appropriate accommodation, and timely handling of appeals.
• Manages and maintains learning lab rooms by being in regular contact with laboratory personnel and staff, thereby ensuring rooms are booked and configured properly, supplies are replenished, equipment is working and access to rooms, course materials and tools is in place for the teaching team.
• Oversees repairs, storage and inventory of lab supplies and equipment by being in regular contact with laboratory personnel and staff. Purchases lab equipment and supplies.
• Manages and maintains accurate student records, including lab attendance records, grade sheets, class and lab lists, and ensures grades are posted in a timely manner.
• Liaises with the undergraduate office to upload grades to OnQ.
• Administers and manages the logistics of the senior year Mathematics and Engineering seminar course (MTHE 494) by liaising with course instructors and external speakers.
• Oversees the delivery of safety instruction by appropriate personnel to students enrolled in lab courses.
• Additional student advising and course preparation duties will be assigned by the Mathematics and Engineering Chair

**Department – Wide**

• Advise undergraduate students on academic program planning, course selection, degree requirements, policies and procedures that impact on the students’ ability to achieve their academic objectives.
• Initiates and/or supports special projects to improve the learning experience for students. This may include enrichment programming, program selection, information about math-related career paths, etc.
• Participate at Queen’s recruitment events to answer questions about the first year in Mathematics and Statistics.
• Undertake other duties as assigned in support of the Department.

**REQUIRED QUALIFICATIONS:**

• Bachelors Degree in Engineering and Applied Science, Master’s Degree preferred combined with several years’ experience as a teaching assistant or other teaching roles.
• Licensed Professional Engineer would be considered an asset.
• Strong mathematical background.
• Experience in Engineering Design.
• Project management experience is preferred.
• Experience in a supervisory role in preferred.
• Consideration may be given to an equivalent combination of education and experience.

**SPECIAL SKILLS:**

• Advanced data management and analysis skills.
• Excellent communications and interpersonal skills. Incumbent must be able to interact effectively with students and instructors.
• Strong organizational and planning skills, in order to coordinate work of program and individuals.
• Demonstrated analytical, interpretive, and problem-solving skills. Incumbent should be able to solve unexpected problems as they arise, referring only extremely complex problems to supervisors.
• Effective supervisory skills and ability to motivate and create a positive work environment.
• Advanced administrative skills, including use of computers for data analysis and word processing, spreadsheet and database management.

DECISION MAKING:
• Finds solutions to unanticipated problems. For example: Last minute reassignment of duties e.g. asking another TA to step in to facilitate a lab or grade in place of another. Decides whether complexity of the problem warrants the involvement of more senior staff. Determines how problem/solution will impact project development.
• Determines when to respond to student requests for support, escalating or redirecting to others as appropriate.
• Decides if and when equipment/supplies require repair/replenishment, and purchases or authorizes the purchase of equipment and supplies to support course offerings, within established procedures and guidelines.
• Recommends new procedures and changes to existing procedures in order to positively impact course operation and to avoid future difficulties.
• Decides how best to analyze data, thresholds for removing weak test items.
• Determines whether course materials are accurate and appropriate.
• Determines what information should be distributed, to whom, and in what format. Decisions will be made based on the relevance of the information and the impact that recipients can have on the project outcome.
• In consultation with the Mathematics and Engineering Chair, determines the scope, timeline and resources required to successfully project manage. Decides on success criteria, key project milestones, and deliverables, and determines when variances from the project plan require involvement for more senior staff.

RESEARCH ASSESSMENT QUESTIONS:
1. Is this position technical in nature in a teaching or research lab or lab-related area? ☒ ☐
2. Does this position support a research project? ☐ ☒
   If yes, indicate name of the project:
3. Does this position report directly to a Principal Investigator (PI)? ☐ ☒
   If yes, indicate name of the PI:

SIGNATURES:

Incumbent

Date