

Class No.:	
Original Date:	May 2024
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Pay Group:	28

CLASS SPECIFICATION

LEAD DATABASE ADMINISTRATOR

NATURE AND SCOPE OF WORK

Reporting to the Manager, Infrastructure, Digital Technology Services (DTS), the lead database administrator is responsible for the strategic design, implementation, maintenance, and security of the university's databases and related services, ensuring optimal performance, reliability, and data integrity. The incumbent will provide database expertise, oversight, and support to service the requirements of the university's systems.

ILLUSTRATIVE EXAMPLES OF DUTIES

- Strategic planning, design, development, and implementation of database solutions to support the university system operations, including DTS, academic and administrative, student information, ERP and financial, human resources, and research databases.
- Design and perform routine database maintenance programs, including log monitoring, backups, restores, and optimization.
- Identify opportunities for optimization, tuning, and capacity planning.
- Monitor database performance and troubleshoot issues.
- Create, implement, and enforce security measures in accordance with university policy and governance to protect sensitive data, including user authentication, access controls, encryption, and auditing.
- Create and maintain backup and recovery strategies to ensure the integrity and availability of data in the event of system failures, disasters, or security breaches.
- Plan and perform database and related infrastructure upgrades, patches, and migrations.
- Provide technical support and troubleshooting assistance to users and DTS staff for database and related systems issues, ensuring timely resolution.
- Create and maintain database and related application documentation, including database schemas, configuration settings, and troubleshooting procedures.

- Conduct training sessions and workshops for end-users and DTS staff to promote best practices in database usage, data management, and security.
- Stay abreast of emerging technologies, trends, and best practices in database administration and recommend innovative solutions to enhance the efficiency, reliability, and security of database systems.
- Proactively engages with faculty, staff, academic and student community to ensure that these groups are well supported in their database requirements.
- Collaborate with cross-functional teams, including DTS colleagues, academic departments, and administrative units, to support institutional initiatives and projects.
- Produces usage reports and configures analytics tools. Analyzes reports and provides recommendations.
- Collaborates with other DTS team members and vendors to support the administration and maintenance of database services, ensuring that university community needs are well represented.
- Uses DTS project lifecycle, processes, and tools to organize and deliver the digital solutions.
- Performs duties related to the qualifications and requirements of the position.
- Mentors and provides technical expertise to the database administrator role.

REQUIRED KNOWLEDGE, ABILITIES AND SKILLS

- Extensive knowledge of database administration for Oracle and Microsoft SQL Server databases, servers, and appliances.
- Extensive knowledge of SQL DDL, DML and DQL syntax and techniques in either or both Oracle or Microsoft SQL Server environment.
- Extensive knowledge of Unix/Linux and Microsoft Windows operating systems.
- Thorough knowledge of programming languages as well as experience in shell scripting.
- Considerable knowledge of administration of web servers and application servers.
- Extensive knowledge of database design principles, data modeling, and normalization.
- Familiarity with database performance tuning, optimization, and troubleshooting.
- Experience with database security practices, including user authentication, access controls, and encryption.
- Experience in facilitating workshops and interviewing to gather and document requirements.
- Ability to conduct system testing, coordinate testing, problem solve issues, document test results.

- Ability to deliver systems training using different training modalities.
- Ability to develop high quality, clear, concise documentation.
- Ability to exercise tact, diplomacy, discretion, and sensitivity when dealing with university community members.
- Ability to facilitate conversations between faculty, staff, academic and students with technical DTS and vendor team members.
- Ability to collaborate and work in cross-functional teams, including faculty, academic, students, project manager, systems analysts, vendors, and other teams required to deliver a digital solution to the academic community.
- Understands the context of issues to exercise initiative and judgement regarding action required.
- Ability to multitask, maintain attention to detail, apply organization skills to meet deadlines, and work with minimal supervision.
- Ability to understand and follow complex verbal and written instructions, and communicate information effectively, both verbally and in writing.
- Ability to adapt to changing situations, anticipate needs, and reprioritize tasks efficiently.
- Strong collaboration and coordination skills to maintain effective working relationships with other DTS teams and within the university community.

REQUIRED TRAINING AND EXPERIENCE

- 5+ years of relevant professional experience, preferably in a post-secondary institution and large-scale, enterprise-level environments.
- Experience in developing high quality documentation required to support digital solutions.
- Completion of a bachelor's degree in an IT related discipline.
- Experience in effectively communicating information to different levels within an organization.
- ITIL.
- Certification as either Oracle OCP or Microsoft MCDBA, MCSDB, or MCSE.