**BIS 3204 Database DB Programming (4 CU)**

**Course Description:** By the end of this course, the student will: Understand the use of SQLPlus and the SQL language with a fourth generation general purpose language to generate scripts, reports and database objects; Be able to write server side stored procedures and triggers; Apply the material in group database design and implementation of projects

**Indicative Content:** In this course, students will design, critique and develop database applications using SQL with fourth generation languages and SQL embedded in third generation languages such as C. Topics include: modular design and development, module development, and compiling and linking. They also include use of triggers, embedded procedures, dynamic SQL preparation, and database cursors. Finally, exception and error handling and development with in a local and distributed application environment will be discussed.

**Reference Books:**

i. G. Reese, *Database Programming with JDBC and Java*, O’Reilly Media, Inc.; 2nd edition, 2000.

ii. M. Fisher, *JDBC API Tutorial and Reference*, Prentice Hall; 3rd edition, 2003.