School of Management

The School of Management's mission is to meet the challenges of a rapidly changing, technology-driven, global society by partnering with the business community to:

- deliver high quality management education to a diverse group of undergraduate and graduate students and practicing executives;
- develop and continuously improve programs advancing management education and practice; and
- conduct research enhancing management knowledge.

Because the companies the School serves operate in a rapidly changing, global economy, U.T. Dallas must be prepared to meet new challenges with new programs that address business needs and research that deals with business problems that are the byproducts of change. The firms the School of Management serves must evolve continuously to remain competitive, and this requires that the School be just as innovative and responsive to the changing competitive landscape. The School is committed to meeting this need.

The Bachelor of Science degree in Business Administration is designed to provide students with a broad preparation for a business career and to lay the foundation for further study in business administration. Strong emphasis is placed on problem solving techniques that are typical of the modern business organization functioning in a complex environment. Students are prepared to apply their skills and knowledge toward solving the complex problems that face business and industry in today's society. The Bachelor of Science in Business Administration offers concentrations in Finance and Management Information Systems in addition to the general degree. A double major in Biology is offered in conjunction with the Biology Department.

The program leading to the degree of Bachelor of Science (B.S.) in Accounting provides students a broad-based education that balances conceptual with pragmatic knowledge and exposes accounting students to other related areas. Completion of this program will enable students to seek information services related positions in industry or government and to sit for professional examinations such as Certified Management Accountant, Certified Internal Auditor, or Certified Information Systems Auditor. Students who desire a comprehensive accounting education and are seeking to become Certified Public Accountants are advised to pursue the combination of the B.S. and M.S. degrees in Accounting. Students who successfully complete both degrees may choose to sit for the CPA examination upon completion of the 150 semester hour educational requirement of the Texas State Board of Public Accountancy.

Both degrees contain a central core of 24 hours. In the core courses, students have an opportunity to learn theories and analytical techniques that can be applied to the functional areas of business, such as finance and marketing. They are exposed to the international dimensions of business activities and to social and political factors that impinge on business behavior. A capstone course in the social and political environment of business provides an integrative experience where students are challenged to solve real world business problems.

Students are also required to take courses outside the School of Management in order to broaden their educational experience in preparation for leadership roles as professionals and/or managers in the modern business organization.

Fast Track Baccalaureate/Master's Degrees

The Fast Track B.S./MBA program is designed to permit undergraduate students enrolled at U.T. Dallas to begin work on the Master of Business Administration (MBA) degree before graduation. Qualified seniors may take up to 12 hours of graduate courses in Management that will apply toward the bachelor's degree and also satisfy requirements for the MBA degree. These courses will be selected from a list determined by the School. The Fast Track MBA program is only available for students who are planning to enroll in the Evening MBA Program.
The Fast Track B.S./M.S. in Accounting program is designed for students enrolled in the Bachelor of Science in Accounting program at U.T. Dallas to begin work on the Master of Science in Accounting degree before graduation. The program permits students to meet the educational requirements of the Texas State Board of Public Accountancy to become Certified Public Accountants. Qualified seniors may take up to 9 hours of graduate courses in Accounting that will apply to the bachelor's degree in Accounting and also satisfy requirements for the M.S. in Accounting degree. Students choosing this program may select from four tracks for their graduate studies. These courses will be selected from a list determined by the School. Upon entering the graduate accounting program, students may select any specialization for their M.S. in Accounting degree.

Admission to the Fast Track programs requires an overall GPA of 3.0, senior status, and approval from the student's advisor. Students are also required to meet admission requirements of the MBA and M.S. programs, including the GMAT scores. The student must take the GMAT examination prior to completing the baccalaureate degree. Students interested in participating in these programs should apply in the School of Management Advising Office (call 972-883-2750).

Admission to the Undergraduate Business Administration or Accounting Program

The School of Management is an upper-division school. Students entering U.T. Dallas at the lower-division who seek admission to the Business Administration or Accounting major must satisfactorily complete the 42 credit hours which constitute the lower-division core curriculum.

Courses taken by upper-division transfer students to make up deficiencies in prerequisites may not be used to satisfy upper-division degree requirements. Also note that fifty percent of the upper-division business credit hours must be taken at U.T. Dallas.

To receive a double major in Accounting and Business Administration, an additional 12 hours of coursework in the field must be taken. For Accounting and MIS, take CS 1315, CS 3333, BA 4326 and either BA 4319, BA 4324, BA 4327 or BA 4395 in addition to the courses taken to satisfy the accounting major. For Accounting and Business Administration, take an additional 12 hours from Groups 1 and 2 below.

Minors

The School of Management does not offer minors at this time.

Bachelor of Science in Business Administration and Biology Degree Requirements (Double Major - 135 hours)

I. Core Curriculum Requirements\(^1\): 42 hours

A. Communication (6 hours)
   3 hours Communication (RHET 1302)
   3 hours Communication Elective (BA 4305) \(^2\)

B. Social and Behavioral Sciences (15 hours)
   6 hours Government (GOVT 2301 and 2302)
   6 hours History (HST 1301 and 2301)
   3 hours Social and Behavioral Sciences Elective (ECO 2301) \(^2\)

C. Humanities and Fine Arts (6 hours)
   3 hours Fine Arts (AP 1301)
   3 hours Humanities (A&H 1301)

D. Mathematics and Quantitative Reasoning (6 hours)
   6 hours Calculus (MATH 1325 and 1326) \(^2\ \^3\)
E. Science (9 hours)
9 hours Chemistry (CHM 1311, 1111, 1312, 1112 and 2123)

Curriculum Requirements can be fulfilled by other approved courses from accredited institutions of higher education. The courses listed in parentheses are recommended as the most efficient way to satisfy both Core Curriculum and Major Requirements at U.T. Dallas.

II. Major Requirements: 81 hours

Business and Management Major Preparatory Courses (15 hours beyond Core Curriculum)
ACCT 2301* Introductory to Financial Accounting
ACCT 2302* Introductory to Cost Management
BA 2301* Business and Public Law
ECO 2301* Principles of Macroeconomics
ECO 2302* Principles of Microeconomics
MATH 1325* Applied Calculus I
MATH 1326* Applied Calculus II
MATH 2333* Matrices, Vectors, and Their Application

Business and Management Core Courses (21 hours)
BA 3341 Business Finance
BA 3351 Management Information System
BA 3352 Production Management
BA 3361 Organizational Behavior
BA 3365 Marketing Management
BA 4371 International Business
BA 4305 Social & Political Environment of Business
STAT 3360 Probability and Statistics for Management and Economics
or STAT 3341 Probability and Statistics in Science and Engineering
or STAT 3332 Statistics for Life Sciences

Biology Major Preparatory Courses (16 hours beyond Core Curriculum)
CHM 2323*/2123* and CHM 2325*/2225* Organic Chemistry I and II with lab
PHYS 1301/1101 College Physics I with lab
or PHYS 3341/2125 Physics for Biosciences I with lab
PHYS 1302/1102 College Physics II with lab
or PHYS 3342/2126 Physics for Biosciences II with lab

Biology Core Courses (29 hours)
BIO 2301* and 2101* Modern Biology I and workshop
BIO 2302* and 2102* Modern Biology II and workshop
BIO 2281* Introductory Biology Laboratory
BIO 3301 and 3101 Classical and Molecular Genetics with workshop
BIO 3302 and 3102 Eukaryotic Molecular and Cell Biology with workshop
BIO 3361 and 3161 Biochemistry I with workshop
BIO 3362 and 3162 Biochemistry II with workshop
BIO 3380 Biochemistry laboratory

2 A required Major course that also fulfills a Core Curriculum requirement. Hours are counted in Core Curriculum.
3 Students may substitute Calculus (MATH 2417 and 2419).
*Indicates a prerequisite class to be completed before enrolling for upper-division classes.

III. Elective Requirements: 12 hours

Advanced Electives
All students are required to take at least six hours of advanced electives outside their major field of study. These must be either upper-division classes or lower-division classes that have prerequisites. These are satisfied with CHM 2323 and 2325 counted under Major Preparatory Courses above.

Guided Electives (12 hours)
Business Administration: (9 hours) To be selected from ACCT 3341, ACCT 4342, BA 4321, BA 4322, BA 4346.
Biology: (3 hours) BIO 4380 Cell and Molecular Biology Laboratory or approved upper-level biology course.

Specified Course Descriptions

A&H 1301 (HUMA 1301) Exploration of the Humanities (3 semester hours) An introduction to the concept of cultural tradition through the study of selected works of literature, philosophy, music, and visual art. Emphasis on the relations among various forms of cultural expression and developing students' ability to interpret complex artistic works in their historical, cultural, and intellectual contexts. General education core course. (3-0) S

ACCT 3341 Intermediate Cost Management (3 semester hours) A study of business management's internal accounting information needs as it pertains to cost control and containment. Emphasis on the processes of business planning, controlling, and decision making. Topics include cost behavior, cost accumulation alternatives, cost allocation issues, budgeting, and performance measurement. Prerequisite: ACCT 2302. (3-0) Y

ACCT 4342 Accounting Information Systems (3 semester hours) The course focuses on the needs and responsibilities of accountants as end users of information systems. It is based on the use of conceptual frameworks to emphasize the professional and legal responsibility of accountants and auditors for the design, operation, and control of AIS applications. While the course is primarily constructed for accountants, other business majors may find the contents beneficial to their careers. Prerequisite: ACCT 3321. (3-0) S

AP 1301 (ARTS 1301) Exploration of the Arts (3 semester hours) This course introduces students to the physical and intellectual demands required of the author, the performer, and the visual artist. This introduction includes, but is not limited to, the student's production of a creative project as well as written assessments of art and performance. (3-0) Y

BA 2301 (BUSI 2301) Business and Public Law (3 semester hours) Commercial and administrative law, focusing on the law of contracts, agency, bailments, property, and laws of partnerships and corporations. (3-0) Y

BA 3341 Business Finance (3 semester hours) Theoretical and procedural considerations in the administration of finances in the firm: sources and uses of funds, working capital, capital budgeting, capital structure, and costs of capital. Corequisite: STAT 3360. (3-0) Y

BA 3351 Introduction to Management Information Systems (3 semester hours) Introduction to basic management information systems and computer concepts. Emphasis on the various facets of the computer, information processing including computer applications, processing data into information, computer hardware, file organization and databases, communications, and information system development. Use of word processing, spreadsheet, and database application software to develop PC skills. (3-0) S

BA 3352 Production Management (3 semester hours) Applications of operations research methods to production problems. Production processes in the business firm with emphasis on forecasting, production planning, and production control techniques. Prerequisite: STAT 3360. (3-0) Y

BA 3361 Organizational Behavior (3 semester hours) An integrated social science approach to administrative problems using behavioral sciences. Behavior in organizations is examined with attention given to such topics as performance appraisal, selection, training, motivation, job satisfaction, communications, leadership, small group processes, decision making, power, conflict, organizational structure, and organizational change. (3-0) S

BA 3365 Marketing Management (3 semester hours) Marketing principles including marketing planning, the decision making environment, market measurement, product decisions, promotion, pricing, and distribution. Special emphasis placed upon the determination and evaluation of market segments. (3-0) S

BA 4305 Social and Political Environment of Business (3 semester hours) Capstone-level course requiring integration of all fields of business. Students will draw on their broadened awareness of various environmental influences (social and political) to solve business problems. Management alternatives will be examined with an ethical perspective relating policy trends to the strategic planning mode. Prerequisite: Completion of all core courses. (3-0) S
BA 4321 Database Fundamentals (3 semester hours) Database theories, conceptual data modeling techniques, database management, and database development practice with emphasis on relational database systems. Topics include entity-relationship data model, data planning, data administration, SQL, relational theories, distributed databases, database development project, and other database management issues, such as concurrency control, data security, and integrity. A database management system software package is used to implement working database systems. (3-0) Y

BA 4322 Systems Analysis and Design (3 semester hours) An overview of systems development methodologies will be presented. In addition to concepts in systems analysis and design, the students will be exposed to concepts in project management, and information gathering techniques. Projects focusing on the use of CASE tools will also be an integral part of the course. Prerequisite: BA 4321. (3-0) Y

BA 4346 Investment Management (3 semester hours) Examines a wide range of issues concerning the management risk and the measurement of investment performance. The objective of the course is to provide an understanding of the role of modern financial theory in portfolio management and to present a framework for addressing a wide range of issues in the management of financial assets. The topics covered include valuation, the measurement of risk and portfolio performance, the management of portfolios of fixed income securities, and derivative securities. Prerequisites: STAT 3360, BA 3341, and BA 3351. (3-0) S

BA 4371 International Business (3 semester hours) Examination of worldwide patterns of trade and investment. Overview of financial, managerial, and marketing problems confronted by multinational firms. Prerequisites: BA 3341 and 3365. (3-0) S

BIO 2101 Introduction to Modern Biology Workshop I (1 semester hour) Problem solving and discussion related to the subject matter in BIO 2301. Corequisite: concurrent enrollment in BIO 2301. (1-0) Y

BIO 2102 Introduction to Modern Biology Workshop II (1 semester hour) Problem solving and discussion related to the subject matter in BIO 2302. Corequisite: concurrent enrollment in BIO 2302. (1-0) S

BIO 2281 Introductory Biology Laboratory (2 semester hours) Experiments designed to illustrate the chemical nature of genes and gene expression. Among the topics to be introduced are biomolecular structure, enzymology, electron microscopy, cell biology, and the properties of DNA. Techniques include column chromatography, spectroscopy, cytochemistry, basic microbiological manipulations, gel electrophoresis of nucleic acids and proteins, the isolation of DNA, and computer-aided visualization of macromolecular structures. Prerequisite: BIO 2301 (also see prerequisites for BIO 2301). (1-4) Y

BIO 2301 Introduction to Modern Biology I (3 semester hours) Presentation of some of the fundamental concepts of modern biology, with an emphasis on the molecular and cellular basis of biological phenomena. Topics include the chemistry and metabolism of biological molecules, elementary classical and molecular genetics, and selected aspects of developmental biology, physiology (including hormone action), immunity, and neurophysiology. Prerequisites: General Chemistry I and II. Corequisite: concurrent enrollment in BIO 2301. (3-0) S

BIO 2302 Introduction to Modern Biology II (3 semester hours) Continuation of BIO 2301. The emphasis will be on evolution, biological diversity, physiology, and developmental biology. Corequisite: concurrent enrollment in BIO 2102. (3-0) S

BIO 3101 Classic and Molecular Genetics Workshop (1 semester hour) Problem solving and discussion related to the subject matter in BIO 3301. Corequisite: Concurrent enrollment in BIO 3301. (1-0) S

BIO 3102 Eukaryotic Molecular and Cell Biology Workshop (1 semester hour) Problem solving and discussion related to the subject matter in BIO 3302. Corequisite: Concurrent enrollment in BIO 3302. (1-0) S

BIO 3161 Biochemistry Workshop I (1 semester hour) Problem solving methodology in biochemistry; discussion of recent advances in areas related to the subject matter in BIO 3361. Corequisite: Concurrent enrollment in BIO 3361. (1-0) S

BIO 3162 Biochemistry Workshop II (1 semester hour) Problem-solving methodology in biochemistry; discussion of recent advances in areas related to the subject matter in BIO 3362. Corequisite: concurrent enrollment in BIO 3362. (1-0) Y

BIO 3301 Classical and Molecular Genetics (3 semester hours) The phenomenon of heredity, its cytological and molecular basis; gene expression and transfer of genetic information, with major focus on bacterial and model eukaryotic systems; genetic recombination and chromosome mapping; tetrad analysis; mutations and mutagenesis; genetic interactions; application of recombinant DNA techniques to genetic analysis. Prerequisites: BIO 2301 and Organic Chemistry I. Corequisite: concurrent enrollment in BIO 3101. (3-0) S

BIO 3302 Eukaryotic Molecular and Cell Biology (3 semester hour) Structural organization of eukaryotic cells; regulation
of cellular activities; membranes and transport; cellular replication; examples of cell specialization such as blood (immunoglobulins) and muscle cells. Prerequisites: BIO 3301 and BIO 3361. Corequisite: concurrent enrollment in BIO 3102. (3-0) S

**BIO 3361 Biochemistry I** (3 semester hours) Structures and chemical properties of amino acids; protein purification and characterization; protein structure and thermodynamics of polypeptide chain folding; catalytic mechanisms, kinetics and regulation of enzymes; energetics of biochemical reactions; generation and storage of metabolic energy associated with carbohydrates; oxidative phosphorylation and electron transport mechanisms; photosynthesis. Prerequisites: Organic Chemistry I and II. Corequisite: concurrent enrollment in BIO 3161. (3-0) S

**BIO 3362 Biochemistry II** (3 semester hours) Breakdown and synthesis of lipids; membrane structure and function; nitrogen metabolism and fixation; nucleotide metabolism; structure and properties of nucleic acids; sequencing and genetic engineering; replication, transcription, and translation; chromosome structure; hormone action; biochemical basis of certain pathological processes. Prerequisite: BIO 3361 or its equivalent, or consent of instructor. Corequisite: concurrent enrollment in BIO 3162. (3-0) Y

**BIO 3380 Biochemistry Laboratory** (3 semester hours) Experiments with biological macromolecules: isolation of DNA and analysis by restriction-enzyme digestion, ionic properties and spectroscopic analysis of DNA and proteins, purification and characterization of enzymes. Techniques introduced include electrophoresis, viscosity, chromatography, centrifugation, titration of amino acids, and a variety of biochemical separation techniques. Prerequisite: BIO 3361. Suggested additional preparation: BIO 3301. (1-4) S

**CHM 1111 (CHEM 1111) General Chemistry Laboratory I** (1 semester hour) Introduction to the chemistry laboratory. Experiments are designed to demonstrate concepts covered in CHM 1311; including properties and reactions of inorganic substances, and elementary qualitative and quantitative analysis. (0-3) S

**CHM 1112 General Chemistry Laboratory II** (1 semester hour) A continuation of CHM 1111 demonstrating the concepts covered in CHM 1312, including acid-base chemistry, reaction kinetics, electrochemistry, polymers, and organic synthesis. Prerequisite: CHM 1111 or 1215. (0-3) S

**CHM 1311 (CHEM 1311) General Chemistry I** (3 semester hours) Introduction to elementary concepts of chemistry theory. The course emphasizes chemical reactions, the mole concept and its applications, and molecular structure and bonding. (3-0) S

**CHM 1312 (CHEM 1312) General Chemistry II** (3 semester hours) A continuation of CHM 1311 treating metals; solids, liquids, and intermolecular forces; chemical equilibrium; electrochemistry; organic chemistry; rates of reactions; and environmental, polymer, nuclear, and biochemistry. Prerequisite: CHM 1311 or 1315. (3-0) S

**CHM 2123 (CHEM 2123) Introductory Organic Chemistry Laboratory I** (1 semester hour) The experimental skills associated with organic functional group reactions. Prerequisite: CHM 2323 (may be taken concurrently). (0-4) S

**CHM 2225 (CHEM 2225) Introductory Organic Chemistry Laboratory II** (2 semester hours) Continuation of Organic Chemistry Laboratory I. Prerequisites: CHM 2323 and 2123; corequisite: CHM 2325. (0-8) S

**CHM 2323 (CHEM 2323) Introductory Organic Chemistry I** (3 semester hours) The covalent bond. Organic chemistry: aliphatic and aromatic compounds; covalent inorganic and organometallic compounds; a survey of the organic functional groups and their typical reactions; stereochemistry. The first course in organic chemistry. Satisfies the basic organic chemistry lecture requirements for pre-health profession students. Prerequisite: CHM 1312 or 1316. (3-0) S


**ECO 2301 (ECON 2301) Principles of Macroeconomics** (3 semester hours) An introduction to theories of the determination of national production and income, interest rates, inflation, and unemployment. Other topics include the banking system, the balance of payments, economic growth and development. (3-0) S

**ECO 2302 (ECON 2302) Principles of Microeconomics** (3 semester hours) An introduction to theories of the behavior of
markets. Topics include the theory of demand and supply, market structure, resource markets, international interdependence in commodity markets, the role of government policy and regulation. (3-0) S

**GOVT 2301 Constitutional Foundations and Political Behavior in the U.S. and Texas** (3 semester hours) This course examines the evolution and current state of political behavior and public policy making in the U.S. and Texas. Topics discussed will include the constitutions, federalism, intergovernmental relations, voting, elections, political parties, public opinion, and interest groups. (Fulfills one-half of the legislative requirement of 6 hours of American government.) (3-0) S

**GOVT 2302 Political Institutions in the U.S. and Texas** (3 semester hours) This course explores the primary institutions of U.S. and Texas government. It examines the bureaucracy as well as the executive, legislative, and judicial branches of government at the state and federal level. (Fulfills one-half of the legislative requirement of 6 hours of American government.) (3-0) S

**HST 1301 Themes and Ideas in American History** (3 semester hours) An introduction to the methods of historical inquiry through the study of selected main themes in American history. A course designed to offer students an understanding of the historical and cultural context of America in the contemporary world. Fulfills one-half of the Texas legislative requirement for six hours in American history. (3-0) S

**HST 2301 Issues in American History** (3 semester hours) Readings, commentary, and discussion aimed at varying aspects of history and culture. Fulfills one-half of the Texas legislative requirement for six hours in American history. (3-0) Y

**MATH 1325 Applied Calculus I** (3 semester hours) Functions and graphs, differentiation, maxima and minima, exponential and logarithmic functions, integration, applications of integrals. Cannot be used to satisfy degree requirements or majors in the School of Engineering and Computer Science or major requirements in the School of Natural Sciences and Mathematics. Credit given for only one of MATH 1325 or 2417. Prerequisite: MATH 1314 or equivalent. (3-0) S

**MATH 1326 Applied Calculus II** (3 semester hours) Applications of differential equations, functions of several variables, least squares modeling, multiple integrals, infinite series. Cannot be used to satisfy degree requirements for B.S. majors in Schools of Engineering and Computer Science or Natural Sciences and Mathematics. Credit given for only one of MATH 1326 or 2419. Prerequisite: MATH 1325. (3-0) S

**MATH 2333 Matrices, Vectors, and Their Application** (3 semester hours) Matrices, vectors, determinants, inverses, systems of linear equations, and applications. Cannot be used to satisfy degree requirements for majors in the School of Engineering and Computer Science, or major requirements in the School of Natural Sciences and Mathematics. Credit given for only one of MATH 2333 or 2418. Prerequisite: MATH 1314 or equivalent. (3-0) S

**PHYS 1101 College Physics Laboratory I** (1 semester hour) A laboratory to accompany PHYS 1301. Corequisite: PHYS 1301. (0-3) Y

**PHYS 1102 College Physics Laboratory II** (1 semester hour) A laboratory to accompany PHYS 1302. Corequisite: PHYS 1302. (0-3) Y

**PHYS 1301 College Physics I** (3 semester hours) Algebra based basic physics. Topics include mechanics, heat and thermodynamics. Prerequisite: MATH 1314. (3-0) Y

**PHYS 1302 (PHYS 1302) College Physics II** (3 semester hours) Continuation of PHYS 1301. Topics include electricity and magnetism and optics. Prerequisites: PHYS 1301. (3-0) Y

**PHYS 2125 Physics Laboratory I** (1 semester hour) Laboratory course to accompany PHYS 2325. Personal computer-based data presentation and curve fitting. Basic measurement concepts such as experimental uncertainty, mean, standard deviation, standard error, and error propagation will be covered. Corequisite: PHYS 2325. (0-3) Y

**PHYS 2126 Physics Laboratory II** (1 semester hour) Laboratory course to accompany PHYS 2326. Builds on concepts of Physics Lab I. Will emphasize the use of an oscilloscope and measurements using simple circuits constructed in class. Corequisite: PHYS 2326. (0-3) Y

**PHYS 3341 Physics for Bio Science I** (3 semester hours) Calculus based. Basic physics for pre-health science students. Topics include space and time, kinematics, forces, energy and momentum, conservation laws, rotation, thermodynamics, and kinetic theory. Focus is on biological applications. Prerequisite: MATH 2417. Must register for Physics Lab I. (PHYS 2125). (3-0) Y
PHYS 3342 Physics for Bio Science II (3 semester hours) Continuation of PHYS 3341. Topics include electrostatics and electromagnetics, electric field and potential, electric currents, magnetic fields, laws of Coulomb, Ampere, and Faraday; Maxwell's theory of propagation, and optics. Focus is on biological applications. Prerequisites: PHYS 3341 and MATH 2419. Must register for Physics Lab II. (PHYS 2126) (3-0) Y

RHET 1302 (ENGL 1302) Rhetoric (3 semester hours) The course presents an integrated approach to writing, reading, and critical thinking by developing the grammatical, logical, and rhetorical skills necessary for university writing. All classes work in a computerized learning environment. Students are taught basic computer literacy and submit all work electronically and on paper. (3-0) S

STAT 3332 Statistics for Life Sciences (3 semester hours) Graphs, histograms, mean, median, standard deviation, Chebyshev's inequality, standardized scores, simple linear regression and correlation; basic rules of possibility, Bayes theorem, Normal; t, X^2, F, binomial and Poisson distributions; point estimation; hypothesis tests and confidence intervals for means, proportions regression coefficients, and correlation; one way ANOVA; Chi-square contingency tables. Applications in life sciences will be emphasized throughout the course. Prerequisite: MATH 1325 or above. (3-0) Y

STAT 3341 Probability and Statistics in Science and Engineering (3 semester hours) Introduction to probability models and statistical data analysis, with emphasis on applications in the sciences and engineering. Cannot be used by mathematical sciences majors to satisfy degree requirements. Prerequisite: MATH 1326 or MATH 2419. (3-0) S

STAT 3360 Probability and Statistics for Management and Economics (3 semester hours) Probability theory including independence, conditioning, density functions, frequently used families of distributions, random variables, expectation, moments, and the central limit theorem; statistical inference including sampling, estimation, hypothesis testing, and regression. Cannot be used by mathematical sciences, engineering, or computer science majors to satisfy degree requirements. Prerequisite: MATH 1326. (3-0) S