BUILDING CONSTRUCTION

See Packaging

BUSINESS LAW, INSURANCE
AND OFFICE ADMINISTRATION

College of Business

201. **Shorthand I**
Fall, Winter, Spring, Summer. 3(4-0)

Shorthand theory, dictation and transcription for students with no previous training.

202. **Shorthand II**
Fall, Winter, Spring. 3(3-1)

Development of typing and transcription competency, speed building.

234. **Typewriting I**
Fall, Winter, Spring, Summer. 2(3-3)

Mastery of keyboard; building speed and accuracy; elementary typewriting problems.

235. **Typewriting II**
Fall, Winter, Spring. 2(3-3)

Improvement of speed and accuracy; presentation of business letters, tabulation and manuscripts; production typewriting.

236. **Advanced Typewriting**
Fall, Winter, Spring. 3(3-1)

Instruction in specialized typewriting problems to develop high-level competency.

304. **Advanced shorthand**
Fall, Winter, Spring. 3(3-1)

May re-enroll for a maximum of 6 credits. 202, 235.

308. **Secretarial Administration I**
Winter, Spring. 4(4-0)

Sophomores.

309. **Secretarial Administration II**
Fall, Winter, Spring. 4(4-0)

Sophomores.

Machine dictation-transcription: duplication and copying processes; machine calculations; record management.

326. **Business Writing**
Fall, Winter, Spring. 4(4-0)

Juniors. Study and analysis of business and industrial communication problems; extensive instruction and practice in writing.

341. **Survey of Business Law**
Fall, Winter, Spring. 4(4-0)

Juniors. Not open to business administration students.

Historical development of the law; courts, court procedures and civil remedies, torts, crimes, contracts, agency, sales, negotiable instruments, real and personal property, including bailments and liens. Textbook and lecture rather than case approach.

350. **Principles of Risk and Insurance**
(AFA 350, 206.) Fall, Winter, Spring. 4(3-0)

Juniors or approval of department.

Risk and risk meeting methods with emphasis on the insurance marketplace. Fundamental principles, legal relationships, types of carriers and organization principles of coverage and industry regulation.

370. **Administrative Office Management**
Fall, Winter, Spring, Summer. 3(3-0)

Juniors.

Analysis of office function and relationship to business organization; information handling and data processing; office design and layout; responsibilities of office administrators.

395. **Principles of Urban Real Estate Administration**
(AFA 355.) Fall, Spring. 3(3-0) AFA 391 or approval of department; EC 201.

Concepts of urbanism, city functions and city growth. Examine physical, locational, legal, social and economic factors. Role of markets, governments and finance. Theories and techniques of valuing urban real estate.

396. **Personal Risks and Insurance**
(AFA 356.) Fall, Winter, Summer. 3(3-0)

Juniors or Juniors in business administration.


397. **Social Insurance Topics**
(AFA 397.) Fall. 4(4-0) EC 200.

Systematic study of the legal, actuarial, social and political aspects of social insurance. Federal and State programs will be analyzed. Problems, solutions and potential alternatives to be discussed.

400H. **Honors Work**
Fall, Winter, Spring, Summer. 1 to 15 credits.

Approval of department.

Independent and informal study in law, office administration or business communications.

416. **Secretarial Administration III**
Seminar
Winter, Spring. 4(4-0)

Seniors or approval of department.

Analysis of the role of the executive secretary.

440. **Law and Society**
Fall, Winter, Spring, Summer. 3(3-0)

Seniors or approval of department.

Legal reasoning and legal institutions. Court systems and court procedures. Relationships of citizen and businessman to governmental agencies. Torts, crimes.

441. **Contracts and Sales**
Fall, Winter, Spring. 3(3-0)

Contracts, including concept of freedom of contract and limitations. Sales. Case study method used.

442. **Agency, Partnerships and Corporations**
Winter. 3(3-0) 441.

The law dealing with agency and business organizations. Case study method used.
443. Negotiable Instruments, Secured Transactions, Property
Spring, 3(2-0) 441
The law of negotiable instruments, secured transactions, and property. Case study method used.

445. Real Estate Law
Winter, 3(3-0) 341 or 441.

446. Interstate and International Business Law
Spring, 3(3-0) 341, 440 or 441.

447. Hotel Law
Winter, Spring, 4(4-0) 440.
Legal aspects of the hospitality industry.

458. Field Studies
Fall, Winter, Spring, Summer. Variable credits. May re-enroll for a maximum of 8 credits. Approval of department. Planned program of observation and work in selected business firms. Analysis and reports.

457. Management of Insurance Enterprises
(AFA 487.) Spring, 3(3-0) 350 or approval of department.
Organizational requirements and functional operations of insurance enterprises with emphasis on methods of ratemaking, reserves, financial statement and investment requirements, loss adjustment, underwriting, and marketing. Statutory limitations on management freedom.

458. The Legal Environment of Business
Winter, Summer. 4(4-0)
Critical examination of the environment in which business operates. Analysis of the consequences of the legal environment of business and the structural framework in which law functions.

459. Legal Environment of International Business
Spring, Summer. 4(4-0)
Commercial and financial transactions in international business, foreign agencies, branches, subsidiaries. Aspects of labor relations, anti-trust, taxation, and transportation as related to foreign operations. Litigation and arbitration in the international business community.

571. Seminar: Office Administration
Winter, Summer. 3 credits. May re-enroll for a maximum of 6 credits. Approval of department. Problems, practices, and policies involved in office administration. Methods of establishing, analyzing, standardizing, and controlling administrative systems and procedures in the office.

572. Seminar in Business Law
Fall, Winter. 4(4-0) May re-enroll for a maximum of 8 credits. 448 or approval of department. Public policy with regard to contracts, anti-trust, security transactions, labor relations of the firm, viewed from the legislative, judicial, and executive vantage points.

844. Insurance Companies as Financial Institutions
(AFA 886.) Winter, 4(4-0)
Analysis of insurance company investment behavior in the capital market. Emphasis on liquidity requirements, interest rates, legal and organizational requirements affecting investment decisions. Micro and macro aspects are investigated.

856. Seminar in Insurance Problems
(AFA 886.) Spring, 4(4-0)
Analysis of insurance problems affecting the public interest. Special emphasis on problems due to changing economic and social conditions. Insurance regulatory, financial, marketing and social problems are evaluated.

980. Special Problems
Fall, Winter, Spring, Summer. Variable credits. Approval of department.

CHEMICAL ENGINEERING CHE

College of Engineering

222. Pollution of the Environment—Causes and Cures
Spring, 3(3-0) 330 or approval of department.

223. Environmental Engineering
Winter, Spring, 3(3-0) 340 or approval of department.

224. Environmental Chemistry
Spring, 3(3-0) 350 or approval of department.

311. Thermodynamics for Chemical Engineering
(Winter.) Fall, 3(3-0) 361.

312. Transfer Processes and Separations I
Winter, 3(3-0) 300, MTH 215.
Thermodynamics of fluid flow. Frictional effects for laminar and turbulent motion of compressible and incompressible fluids. Dimensional analyses and similarity. Treatment of fluid flow as a momentum transfer process.

313. Transfer Processes and Separations II
Spring, 3(3-0) 312.
Heat transfer in solids and flowing fluids. Heat transfer in condensing and boiling systems. Application to engineering equipment. Conden-

314. Transfer Processes and Separations III
Spring, 3(3-0) 311, 312 or concurrently.
Mass transfer in continuous contacting systems. Mass transfer in single-phase systems, transport analogies, interphase transfer and contacting of immiscible phases.

361. Chemical Thermodynamics
Fall, Spring, 3(4-0) One year general chemistry; one year organic chemistry; one year general physics; MTH 215. Interdepartmental and jointly administered with the Chemistry Department.


381. Chemical Engineering Analysis
Fall, Spring, 3(3-0) Students may not receive credit in both 381 and MTH 341, 315. Interdepartmental with the Mathematics Department.

Formulation of ordinary and partial differential equations describing chemical systems. Boundary value problems, numerical methods, matrices, and applications, to chemical engineering systems.

415. Transfer Processes and Separations IV
Fall, 3(3-0) 314.

423. Chemical Engineering Laboratory
(Winter.) Fall, 3(3-0) 315.
Assigned laboratory problems, requiring team effort. Experimental work, involving momenta, heat and mass transfer; separation processes, such as distillation, filtration, and drying; reactor kinetics, automatic process control.

424. Transport Phenomena and Physical Properties Laboratory
Spring, 3(3-0) 313 or concurrently.
Experiments involving the transport processes and measurement of physical, chemical and thermodynamic properties of various materials. Comparison of theoretical and experimental results.

425. Chemical Reaction Engineering
Fall, 3(3-0) 361 or approval of department.

442. Polymer Science and Engineering
Winter, 3(3-0) One year organic chemistry, 561.

443. Chemical Engineering of the Solid State
Spring, 3(3-0) CEM 491.
Structure and properties of inorganic and organic solids. Relation of bond type and steric configuration to mechanical, electrical, thermal, optical properties. Macromolecular structure influences on physical properties. Surface phenomena. Applications.

446. Polymerization
Fall, 3(3-0) One year organic chemistry, basic physical chemistry. Interdepartmental with and administered by the Chemistry Department.
Formation and characterization of polymers of high molecular weight will be emphasized.