

MANAGEMENT/BUSINESS/ ECONOMICS

DR. KEVIN M. ADAMS (adjunct)
 DR. ROBERT B. ALBERTSON
 MR. ROBERT H. CASS
 MS. ELAINE E. DESSOUKI
 DR. LINDA A. FERGUSON
 MR. DAVID G. GARRATY, Program Coordinator
 DR. CHEUL W. KANG
 DR. EHSAN S. SALEK
 MR. FREDRICK B. WEISS

The Department of Management/Business/Economics (MBE) believes that the qualities most needed in management are those facilitated by a strong foundation of liberal education. To that end, the following interdisciplinary program is offered.

The Liberal Arts Management Program

The Liberal Arts Management Program (LAMP) is specifically designed for students wishing to acquire skills and knowledge to prepare them for leadership and management positions in commercial, charitable, or public organizations.

A major in this area is versatile. Students can obtain preparation that leads to graduate programs in such areas as economics, accounting, business administration, public administration, and hospital or health administration. Additionally, students can develop individualized areas of concentration in conjunction with their faculty adviser which can enhance preparation for careers in personnel management, marketing management, advertising, public relations, retailing, banking, sales, civil service, industrial management and accounting.

The College currently offers all of the courses required to sit for the Certified Public Accountant and Certified Management Accounting examinations. To sit for the CPA exam requires 150 hours of coursework, and students interested in sitting for the exam should seek either Professor Weiss, Dessouki, or Albertson as an adviser early in their academic careers. Students seeking accounting certification should plan on taking Accounting I and II their freshman year as well as taking some summer courses, and should be careful of the "54-hour rule."

LAMP will provide two basic integrations. One will be the integration of other academic areas into the understanding of commercial activity and management concepts. This area will draw largely on the quantitative skills of mathematics, the creative skills of art and theatre, the human relations skills of sociology and psychology, and the insightful perspectives on mankind of the humanities and history. The second integration will be theoretical concepts with practical application. This will take place not only within the classroom courses as much as possible, but will also be facilitated by practical experiences such as special term projects and internships.

Statement of Purpose

The general goals of the MBE department are to support the skills, knowledge, and attitudes expected from a liberal arts higher education, and to develop in students in this major the skills and knowledge generally considered necessary as a foundation for entry-level leadership and management positions in commercial, non-profit, or public organizations. This is to be done within an environment which affirms the free exchange of ideas, values intellectual effort, encourages close student-faculty relationships by providing small classes, allows flexible curriculum options, and seeks to constantly improve through the efforts of all participants.

Major Requirements

COURSE NUMBER AND TITLE	SEM. HRS.
Management Core: minimum of 30 semester hours	
MBE 101 Introduction to Business (recommended, but not required)	3
MBE 112 Problem Solving and Decision Making	3
MBE 201 Introductory Macroeconomics	3
MBE 202 Introductory Microeconomics	3
MBE 203 Accounting I	3
MBE 204 Accounting II	3
ISP 101 Fundamentals of Information Systems	3
MBE 301 Principles of Management	3
MBE 316 Marketing Principles	3
MBE 322 Financial Management	3
MBE 400 Seminar in Managerial Ethics	3
Allied Group: 18-19 semester hours	
Introductory Sociology: One of the following: SOC 100, 110, or 188	3
Introductory Psychology: One of the following: PSY 201, 255, or 266	3

See continuation of choices next page

Chart continued from previous page

Statistics: MATH 106 or 226	3
Environment: One of the following: BIO 150 and 151, 207, 250, EES 132 and 133, 200, 210, 250, 320, ENVS 106, 400, 480, INST 180, PHIL 304, POLS 323, PSYC 445	3-4
Oral communications: COMM 222, 325 or PSY 324; if the latter is chosen, then it cannot also be used for the following "Organizations" requirements	3
Organizations: One of the following: COMM 325, INST 315, POLS 343, 373, PSY 322, 324, 364, SOC 303, 305, 327	3
SENIOR SYNTHESIS: Choose either A or B below:	
A. SENIOR COURSE CONCENTRATION: 12 semester hours. Choose a "Career Concentration" in one of the following: International Business, Marketing- Advertising-Public Relations, Human Resource Management, Public Administration, Accounting & Finance, Information Systems, or General	
Choose an MBE 300- or 400-level course in consultation with your adviser related to your choice of concentration	3
Choose two additional 300- or 400-level courses in consultation with your adviser	6
MBE 406, 407 or 408 Senior Seminar OR MBE 491 Independent Integrated Study in Management	3
B. INTERNSHIP: 18 semester hours. Must make successful application in spring semester of junior year for the spring semester senior year experience.	
MBE 414 Internship Exploration and Design	3
MBE 416 Management Internship	12
MBE 417 Internship Seminar	3
TOTAL	54-63

Minor Requirements: Business

COURSE NUMBER AND TITLE (See p. 32 for general minor requirements)	SEM. HRS.
MBE 101 Introduction to Business	3
MBE 201 Introduction to Macroeconomics	3
MBE 202 Introduction to Microeconomics	3
MBE 203 Accounting I	3
MBE 204 Accounting II	3
MBE 301 Principles of Management	3
MBE 316 Marketing	3
One additional 300-level course in MBE OR INST 315 Managing Diversity in Organizations	3
TOTAL	24

**INFORMATION SYSTEMS COURSES
(ISP)**

I01 Fundamentals of Information Systems (3)

Introduces students to the fundamental principles and practices of utilizing information systems to help organizations achieve their goals and carry out their missions. While the course serves as the introductory course in the Information Systems Program curriculum, it is a suitable elective for any student interested in being exposed to fundamental principles of information systems. To be able to apply those principles, students should have a working knowledge of computer applications such as those bundled in Microsoft Office or WordPerfect Office (word processing, spreadsheets, presentation graphics, e-mail) as well as Internet utilization. Offered each semester.

**I05 Information Systems and
Computer Applications (3)**

Students explore current topics in the field of computer science/information systems beyond the introductory level covered in CS 100, including computer networks, effective use of the Internet, and ethical and legal issues related to the

use of information technology. Students learn to use the more advanced features of software applications such as word processing, spreadsheet, database, and presentation programs. Offered intermittently.

MANAGEMENT/BUSINESS/ ECONOMICS COURSES (MBE)

100 Introduction to Economics (3)

Designed to provide students with a solid foundation in fundamental economic literacy and reasoning. Topics include scarcity, incentives, and choice; resource allocation; exchange, competition, and markets; economic efficiency; investment, production, and income; money, interest rates, and GDP; business cycles and governmental policies. Emphasis is placed on active learning and current economic issues and problems. Offered each spring.

101 Introduction to Business (3)

A general survey course designed for the student who desires information about commercial activities to build a basic foundation for more advanced courses, to decide on an academic major, or to complement his/her present major. Offered each semester.

106 Economics and the Environment (3) (Winter Session)

Introduces students to the workings of a market economy in order to allow an examination of the economic forces that lead to environmental problems. Additionally, harnessing economic forces to both prevent and solve environmental problems is examined in the context of current regulatory approaches to dealing with environmental issues. Field trips are conducted in order to demonstrate real-world application of course concepts. Prerequisite: None. Offered in selected Winter Sessions.

112 Problem Solving & Decision Making (3)

Designed to provide the basic skills of management, the course is valuable in improving thinking skills regardless of one's academic major. It examines various methods of problem solving and decision making, progressing from simple decisions under certainty to complex decisions under uncertainty. Both quantitative and creative methods will be used. No prerequisites, but students should have good math (at elementary algebra level) and English skills (beyond 105 level). Offered each semester.

201 Introduction to Macroeconomics (3)

Deals with understanding contemporary economic systems and the analysis necessary to achieve the "economic way of thinking." Prerequisite: elementary algebra skills (MATH 105 or equivalent placement test results) and sophomore status or above. Offered each fall.

202 Introduction to Microeconomics (3)

The second semester of this two-part course deals with understanding and applying the tools of micro-economic analysis to contemporary profit or non-profit organizations. Prerequisite: MBE 201. Offered each spring.

203 Accounting I (3)

A study of the basic principles and systems of accounts that underlie financial reporting. Heavy emphasis is placed on actual bookkeeping to relate concepts. Requires math competency in basic addition, subtraction, multiplication, division, percentages, and ratios. Offered each fall.

204 Accounting II (3)

The second semester of this two-part course deals with the collection of accounting data to prepare financial reports for management use in planning and controlling. Prerequisite: MBE 203. Offered each spring.

216 Taxation (3)

A study of the tax environment and the codes, regulations, and court decisions as they relate to income tax problems of individuals, including tax preparation and tax research. Prerequisite: sophomore status or above. Offered each fall.

301 Principles of Management (3)

W

The study of the art and science of management in relation to the functions of planning, organizing, directing, controlling. Heavy emphasis is given to learning through both in-class and out-of-class group experiences, with substantial writing about such experiences. Prerequisites: completion of all required freshman and sophomore-level MBE courses or consent. Offered each semester.

303 Financial Accounting Theory I (3)

A study of the theory and application of generally accepted accounting principles. The emphasis is on financial statement presentation, current assets and liabilities, intangible assets, and operational assets. Prerequisites: MBE 203, 204. Offered fall of even-numbered years.

304 Financial Accounting Theory II (3)

A continuation of MBE 303. The emphasis is on corporate equity accounts, long-term investments and liabilities, cash flows, pension costs, current value accounting, and foreign currency transactions. Prerequisites: MBE 203, 204, 303. Offered spring of odd-numbered years.

305 International Accounting Theory (3)

Concentrates on accounting for firms engaged in international commerce: translation of foreign currency financial statements, and for branches, subsidiaries, mergers, acquisitions, and divestitures of multinational corporations. Prerequisites: MBE 203 and 204. Offered spring of odd-numbered years.

306 Business Law (3)

A study of contract law and the Uniform Commercial Code. Prerequisites: MBE 101 or 201, and junior/senior status. Offered spring of even-numbered years.

310 Money, Banking, & Financial Institutions (3)

The basics of monetary policy in terms of public policy. Study of Federal Reserve System, commercial bank lending, investments, money, and capital markets. Prerequisites: MBE 201 and 202. Offered fall of odd-numbered years.

316 Marketing Principles (3)

Builds upon the analytical and communication skills gained in lower-level courses. The student gains an understanding of products and services, channels of distribution, pricing strategies, and elements of promotion. Prerequisites: MBE 201 and 202, and junior status or consent. Offered each semester.

317 Advanced Taxation (3)

Continues the study of taxation of individuals, partnerships, and corporations. Topics include advanced topics in individual taxation; business taxation, including sale and exchange transactions, the determination of taxable income, and distributions; and property transactions. Prerequisite: MBE 216. Offered spring of even-numbered years.

322 Financial Management (3)

The study of determining in what assets a firm should invest and determining what sources of funding are appropriate. Mathematical analysis of operating and financial leverage, the cost of capital, management of working capital, and sources of money and capital. Prerequisites: MBE 112, 201-204, and MATH 106. Offered each semester.

324 Human Resource Management (3) W

An in-depth study of why people work and how to assist their development. Topics include manpower planning, selection, performance appraisal, compensation, discipline, and policy issues. Strong behavioral science approach. Suggested precourse: SOC 303 or 305, PSY 255 or 322. Prerequisite: MBE 301 or consent. Offered spring of even-numbered years.

330 History of Economic Thought (3) (H) W

An introductory course focusing on the development of economic thought from Adam Smith up to the present. Emphasis is on the correlation between successive stages of growth in economic theory. Writers covered will include Smith, Ricardo, Malthus, Marx, Marshall, Keynes, Galbraith, and Friedman. Prerequisite: MBE 201 and 202. Offered intermittently.

331 Managerial Economics (3)

Emphasizes business applications of micro-economic tools and concepts. Includes analysis of demand, cost, production functions, and alternative pricing theories. Prerequisite: MBE 201 and 202 and MATH 106. Offered intermittently.

332 Economic Development (3) (S) W

Introduces the student to the major problems and issues in economic development and the economies of less developed countries with respect to achieving social and economic goals. Prerequisites: MBE 201 and 202. Offered spring of odd-numbered years.

333 International Business (3) (S) W

Focuses on the increasing degree of international trade and multinational corporations. Analyzes international exchange, marketing, and personnel policies. Prerequisites: MBE 201 and 202. Offered each fall.

334 Economic Modeling and Forecasting (3) (E)

An applications-oriented course which gives the quantitatively competent student experience in data collection and analysis with the use of computer statistical programs. A review of basic statistics precedes development of the bivariate regression model. Additional topics may include multiple regression, serial correlation, multicollinearity, and dummy variables. Prerequisites: MBE 201 and 202, MATH 106, or consent. Offered intermittently.

**335 Accounting Information Systems (3)
(Winter Session)**

Allows the student to develop a conceptual framework for the development, implementation, and evaluation of an accounting information system. Primary topics include system understanding and documentation, risk analysis, and typical accounting transaction cycles. The lab experience provides application of system concepts to popular software applications. Prerequisite: MBE 203. Offered in selected Winter Sessions.

343 Government & Not-for-Profit Accounting (3)

A study of appropriate accounting for such entities as governments, colleges, churches, hospitals, charities, and clubs. Prerequisite: MBE 203. Offered spring of even-numbered years.

345 Managerial Cost Accounting (3)

The study of cost accounting, budget analysis, and other advanced concepts used by manufacturers and other large businesses or non-profit organizations. Prerequisites: MBE 203 and 204. Offered fall of odd-numbered years.

**348 Marketing Management:
Integrated Marketing Communications (3)**

An advanced marketing course designed to give students the opportunity to apply principles learned in earlier marketing and communications courses through the development of a marketing plan. Prerequisite: MBE 316 or consent. Offered each spring.

355 Auditing (3)**W**

A study of the theory and procedure of public auditing and internal auditing from the standpoint of professional ethics, auditors' legal responsibilities, detection and control of fraud, client relationships, standards of reporting, and management advisory services. Prerequisites: MBE 203, 204. Offered spring of odd-numbered years.

373 Conflict Management (3)**(S)W**

Identical to POLS 373.

390 Field Experience in Management (3)

Offers students an opportunity to participate in a NON-PAID work and learning experience in a formal organization to apply knowledge and skills gained in the classroom, to interact with professionals in a given field, to integrate information and practice, and assess choices of areas of concentration. The student may register for it during the junior or senior year. All work experiences are reviewed by the department. Either during early registration or the week prior to the semester, students should consult with the instructor regarding establishing their own working site or deciding from among those available. A minimum of 100 hours of field work is required for the semester, plus weekly meetings on an individual basis with the instructor, and monthly meetings for discussion by all students enrolled, and preparation of a portfolio of their experiences and the learning derived therefrom. Pass/fail grading. Prerequisites: junior status; 2.5 GPA; MBE 301 or 316 or 322 preferably taken concurrently; consent. Offered each fall.

400 Seminar in Managerial Ethics (3)**W**

A course to assist students to construct for themselves a conceptual framework for examining and making decisions about ethical practices in managing organizations. Learning strategies include self-evaluation exercises, class discussions, readings on ethical frameworks and applying them to cases, analytical issue papers, and oral reports. Prerequisites: MBE 301, 316, 322, senior status or consent. Offered each semester.

401 Management in Literature (3)

Students read excerpts from and entire works of "great works" of literature. Through both class discussions and research papers, students reflect upon how the ideas presented in such works are useful to effective management functions, roles and ethical leadership practices. Some of the works to be read include *The Iliad*, *Henry IV* and *Henry V*, *Billy Budd*, *Heart of Darkness*, *The Autobiography of Malcolm X*, plus selected writings of Plutarch, Herodotus, Thucydides, and Mahatma Gandhi. Film reproductions/recreations of some of these works/persons will be shown. Prerequisite: MBE 301. Offered intermittently.

406 Senior Seminar:**Management Strategy (3)****(I)W**

Centers around the theme that a company achieves sustained success if and only if its managers (1) have an

astute, timely strategic game plan for running the company, and (2) implement and execute the plan with proficiency. This case-orientated course explains how and why a well-conceived, well-executed strategy nearly always enhances a company's long-term performance. Prerequisites: senior status, MBE 301, 316, 322, 400 and all other general studies requirements completed at least concurrently. Offered each semester.

407 Senior Seminar: Small Business Planning (3)**(I)W**

By preparing a comprehensive business plan, students sharpen their understanding of management, integrate strategic thinking with operational constraints, and explore the role of small business in the American economy. Emphasis is on synthesizing knowledge and skills gained in previous courses. Prerequisites: senior status, MBE 301, 316, 322, 400 and all other general studies requirements completed at least concurrently. Offered intermittently.

408 Senior Seminar:**Comparative Economic Systems (3)****(I)**

Students engage in an in-depth, integrated study of the development and functioning of the American economic system compared with that of other countries. Prerequisites: senior status, MBE 301, 316, 322, 400 and all other general studies requirements completed at least concurrently. Offered intermittently.

414 Internship Exploration & Design (3)

Designed to educate the student (who hopes to take MBE 416/417 the following semester) in how to find, design, and maximize independent learning in an internship. A major outcome is the negotiation of a learning plan agreement with a sponsoring organization. Prerequisites: LAMP major with a B (3.0 GPA) or better, English Proficiency Exam passed, all required major and general studies courses completed at least by the end of the semester in which this course is taken, a minimum 50-page autobiography completed during the summer and ready for submission at the first class; application to be made no later than early registration in the previous spring semester. Offered each fall.

416 Management Internship (12)

Students implement their work-and-learning agreement devised in MBE 414 for full-time placement (16 weeks or a minimum of 600 total hours) as a pre-professional in their sponsoring organization, where they gain practical experience in the application of previously acquired knowledge and managerial skills. Students self-evaluate and are evaluated by their organizational supervisor. Pass/fail grading. Prerequisite: MBE 414; must co-register with MBE 417. Offered each spring.

417 Internship Seminar (3)**(I)**

Offered concurrently with the internship. Intended to enhance academic learning and to provide integration of general studies knowledge (particularly that of ethical analysis and action) and management theory and principles

with the experiential learning undertaken in MBE 416. Involves weekly written reports, oral reports, readings in texts and internship-related periodicals, and a major integrative paper as the culminating academic experience. Prerequisite: MBE 414; must co-register with MBE 416. Offered each spring.

490 Independent Study in Management (1-6)

Designed to allow students to undertake an experience-based project and/or to do specific reading, research, and report writing on a topic in management not covered through the regular curriculum. To be taken only upon approval of a supervising professor within the department. Applications must be made no later than the end of the preceding semester. Credit: one—three semester hours per semester; may be repeated for up to a maximum of six semester hours. Offered on demand, but preferably during the summer.

491 Independent Integrated Study in Management (3)

Has the same design purpose and application procedure as MBE 490, but with the further requirements that (1) it must be taken for three semester hours, and (2) the enrolled student must bring synthesis to the particular area of study (and the process of learning) chosen. This synthesis will be a paper putting the particular study into the context of historical perspective, world-view or paradigm perspective, the technological (empirical) perspective (including communications) and its consequences for the cultural or institutional system. Offered on demand, but preferably during the summer.

**MATHEMATICS/
COMPUTER SCIENCE**

MRS. KATHY R. AMES, (adjunct)
 DR. LYDIA KENNEDY
 DR. MARGARET REESE
 DR. Z. JOHN WANG
 MS. DENISE POCTA WILKINSON, Program Coordinator

Mission Statement

To think mathematically and to understand the role mathematics plays in human enterprise are characteristics of liberally educated people. Mathematics contributes two of the seven original liberal arts. Its inherent beauty, its search for pattern, form and irrefutable truth, and its ability to provide a language through which the natural world can be described are examples of its power. Mathematics, always a practical and useful art, beckons as well as a path toward freedom of thought.

The mission of the Mathematics/Computer Science department is to provide an opportunity for all students to gain computational dexterity, to understand the value of mathematics as a human and social endeavor, and to

develop the power of mathematical reasoning, while promoting the rigorous reasoning skills that allow students to investigate the interplay between the abstract and the concrete. The mission of the department with respect to computer science is to provide basic instruction in end-user skills for all students and in-depth instruction in theory and applications for both mathematics and computer science majors. One goal of the department with respect to the education department is to enable our students to pass required PRAXIS exams related to mathematics.

The department has two majors: Mathematics and Computer Science. Within each, students may choose between a theoretical emphasis or one which is more applied. Students are encouraged to take advanced courses in both mathematics and computer science.

A requirement for both mathematics and computer science majors is the Junior Comprehensive Exam (JCE). The goal of the JCE is to ensure that VWC mathematics and computer science majors can exhibit competency in the following areas: basic differential and integral calculus of a single variable; matrix algebra and the fundamental concepts of vector spaces; and the programming language C++.

The department, in conjunction with the VWC Education Department, has created four-year programs which meet the Virginia Standards of Education 2000 for teaching certification at the primary, middle school and secondary levels.

Major Requirements: Mathematics

COURSE NUMBER AND TITLE	SEM. HRS.
MATH/CS 205 Discrete Mathematics	3
MATH 171, or MATH 136, MATH 172, MATH 271 Calculus I, II, & III	9
MATH 303 Multivariable Calculus	3
MATH 307 Linear Algebra	3
MATH 317 Introduction to Algebraic Structures <i>(Satisfies oral competency requirement for mathematics majors.)</i>	3
MATH 323 Real Analysis	3
CS 207 Computer Programming I	3
PHYS 221 & PHYS 222 Physics	8

See continuation of choices next page