AGRB 4721 Capstone Laboratory 0(3) Non-credit laboratory to accompany AGRB 4720. Coreq: AGRB 4720.

AGRB 4730 Special Topics in Agricultural Mechanization 1-3(1-3) Comprehensive study and application of new technologies and methods not covered in existing courses. Emphasizes independent study using innovative approaches to problem solving. May be repeated for a maximum of six credits.

AGRBUSINESS

Professor: W.M. Smathers Jr.; Associate Professors R.D. Lamie, D.B. Willis; Assistant Professors Y.V. Bolotova, M. Vassalos

AGRB 2020 Agricultural Economics 3(3) Analytical survey of the various subdivisions of agricultural economics, including farm organization, enterprise, land economics, marketing, farm prices, governmental farm policies, and the relation of agriculture to the national and international economy.

AGRB 2050 Agriculture and Society 3(3) Introduction to the development of world society focusing on food production, from early hunting and gathering to modern biotechnology. Covers factors driving societal growth with a global perspective. Explores systematic impacts of growth in technical capacity to produce agricultural products on farm and community organization, industrialization, and the global economy.

AGRB 3020 Economics of Farm Management 3(3) Economic principles underlying the organization and operation of agricultural firms and related business enterprises. Particular emphasis is placed on management aspects of the farm as a production unit. Coreq: AGRB 2020 or ECON 2110.

AGRB 3080 Quantitative Agribusiness Analysis I 3(3) Focuses on the integration and use of introductory statistics, mathematics and microeconomic theory as agribusiness decision tools. Profit maximization and cost minimization problems are solved in risky and riskless situations. Regression procedures are used to estimate economic parameters. Expected profit and risk tradeoffs are examined. Coreq: AGRB 2020 or ECON 2110; and MATH 1020 and STAT 2300.

AGRB 3090 Economics of Agricultural Marketing 3(3) General course in marketing agricultural commodities with particular emphasis upon food products. Analyzes efficiency criteria, consumer behavior, market organizations and institutions, and marketing functions. Includes Honors sections. Coreq: AGRB 2020 or ECON 2000 or ECON 2110.

AGRB 3130 Principles of Real Estate Appraisal 3(3) Introduction to basic principles and procedures of real estate appraisal. Topics include the real estate market, principles of valuation, legal concepts, and the application of the comparable sales, cost, and income approaches to real estate valuation. Coreq: FIN 3070.

AGRB 3190 Agribusiness Management 3(3) Study of the principles used in making management decisions and the application of these principles in agribusiness. Emphasizes the application of economics to the solution of problems facing managers of agricultural supply and marketing firms. Coreq: AGRB 3020.

AGRB 3510 Principles of Advertising 3(3) Introduction to the various functions of advertising; research and audience analysis; various media formats; planning, research, and production necessary to create an advertising campaign; social effects, economic effects, and ethical considerations of advertising. Coreq: AGRB 2020.

AGRB 3520 Public Finance 3(3) Principles of financing government; sources of public revenue, objects of public expenditures, problems of fiscal administration, and the application of fiscal policies in stabilizing the national economy. Coreq: Junior standing.

AGRB 3570 Natural Resources Economics 3(3) Principles and problems involved in the use of soil, water, forest, and mineral resources, with special emphasis on economic aspects of alternative methods of resource utilization. Coreq: AGRB 2020 or ECON 2000 or ECON 2110.

AGRB (HLTH) 3610 Introduction to Health Care Economics 3(3) Introductory course in which students learn the basic economics of the institutions comprising the health-care industry. Topics include the underlying supply, demand, and institutional factors impacting health-care availability and cost of health care. May also be offered as HLTH 3610.

AGRB 4020* Production Economics 3(3) Economic analysis of agricultural production involving the concept of the farm as a firm; principles for decision making; the quantitative nature and use of production cost functions and the interactions and applications of these principles to resource allocation in farms and among regions. Coreq: AGRB 3080; and ECON 3060 or ECON 3140.

AGRB 4080 Quantitative Agribusiness Analysis II 3(3) Regression analysis, linear programming, and risk analysis techniques are presented and applied to agribusiness firms to improve firm economic efficiency. Microcomputer optimization and statistical software packages are utilized to develop firm level strategic plan to achieve efficient agribusiness outcomes in uncertain economic environments. Coreq: AGRB 3080.

AGRB 4090* Commodity Futures Markets 3(3) Introduction to the economic theory, organization, and operating principles of agricultural commodity futures markets in the United States. Emphasizes speculation, hedging, and investing in agricultural commodity futures contracts from the standpoint of the agribusiness entrepreneur. Coreq: AGRB 3090.

AGRB 4110* Regional Impact Analysis 3(3) Techniques for analysis of the growth and decline of regions, including economic base theory, shift share, regional input-output, regional econometric models, and fixed impact models. Coreq: AGRB 2020; or both ECON 2110 and ECON 2120.


AGRB 4130* Advanced Real Estate Appraisal 3(3) Topics include highest and best use analysis, data collection, and analyses. Stresses advanced appraisal procedures for income, cost, and comparable sales approach to real estate valuation. Covers eminent domain, the appraisal of property in transition, and specialized property. Coreq: AGRB 3130 or FIN 3070.

AGRB 4210* Globalization 3(3) Utilizes basic principles of international economics (comparative advantage, free trade versus protectionism, exchange rate determination, etc.) to analyze the contemporary problems and issues of the world economy. Emphasizes application of economic principles to current globalization trends. Coreq: AGRB 2020 or ECON 2000 or ECON 2110.

AGRB (PES) 4260* Cropping Systems Analysis 3(2) Application of agronomic and economic principles in solving problems related to the production and marketing of agronomic crops. Major part of the course is a case study in which detailed analysis of a farm, agribusiness, or environmental situation is made with students making formal written and oral presentations of results. May also be offered as PES 4260. Coreq: PES 1040; and Junior standing; and AGRB 2020 or ECON 2000 or ECON 2110. Coreq: AGRB 4261.

AGRB (PES) 4261* Cropping Systems Analysis Laboratory 0(1) Non-credit laboratory to accompany AGRB 4260. May also be offered as PES 4261. Coreq: AGRB 4260.

AGRB 4520* Agricultural Policy 3(3) Review of public agricultural policy programs in the United States and a critical examination of current and proposed government policies and programs affecting the agricultural sector of the economy. Includes economic considerations as related to past and current farm price and income problems. Includes Honors sections. Coreq: AGRB 2020 or ECON 2000 or ECON 2110.

AGRB 4560* Prices 3(3) Review of the basic theory of price under competitive conditions and various modifications; nature, measurement, and causes of daily, seasonal, and cyclical price fluctuations; geographical price relationships; nature, function, and behavior of futures markets; government price programs. Includes Honors sections. Coreq: AGRB 3080 or ECON 4050; and ECON 3060 or ECON 3140.

AGRB (ECON) 4570* Natural Resource Use, Technology and Policy 3(3) Focuses on economic analyses of actual, efficient, and sustainable uses of natural resources. Impacts of technologies that affect these uses, and policies that affect development and use of such technologies. Resource-technology-policy combinations may vary, but an example is crude oil, hybrid automotive engines, and fuel economy standards. May also be offered as ECON 4570. Coreq: MATH 1020 or MATH 1060; and AGRB 3570 or ECON 3140.

AGRB 4600* Agricultural Finance 3(3) Study of the principles and technique of financing in the agricultural sector. Topics include the capital situation in agriculture, concepts of farm financial management, use of credit, capital markets, lending agencies, and estate planning. Coreq: ACCT 2010; and AGRB 2020 or ECON 2000 or ECON 2110.
AGRB (WFB) 4750* Economics of Wildlife Management and Policy 3(3) Integrated approach to the study of the economics of wildlife. Topics include determination of market and nonmarket value, single and multiple species management, enterprise cost and returns, marketing wildlife, leasing methods, complementarity and competitiveness with agricultural and forestry enterprises, and timber and crop damage cost estimates and control. May also be offered as WFB 4750. Preq: AGRB 2020 or ECON 2000 or ECON 2110 or FOR 3040 or WFB 3060.

AGRB 4900 Selected Topics 1-15(1-15) Study of topics in applied economics. Topics may include classroom and/or field experience not normally covered in other classes. May be repeated for credit, but only if different topics are covered. Preq: Junior standing.

AGRB 4910 Internship, Agribusiness, and Community and Rural Development 1-6(1-6) Internship under faculty supervision in an approved agency or firm. Internships provide students with work experience in agribusiness or community and rural development. Students submit a comprehensive report within one week of the end of the internship. A maximum of six internship credits may be earned. Preq: Junior standing and consent of instructor.

AGRB 4940 Creative Inquiry: Community and Rural Development 1-3(1-3) Multi-semester commitment to participate in agricultural and applied economics and community and economic development related research experience for students working in teams, mentored and directed by a faculty member. Students learn to collect, analyze, evaluate, and present information. Suitable for inclusion in the student’s e-portfolio. May be repeated for a maximum of 12 credits. Preq: Consent of instructor.

ATHLETIC LEADERSHIP

Lecture: D. J. Cadorette

AL 3490 Principles of Coaching 3(3) Investigation into the scientific basis of the coaching profession, middle and high school levels. Topics include developing a coaching philosophy, sport psychology, sport pedagogy, sport physiology, athletic administration, and risk management. Current issues regarding sportsmanship, gender equity compliance, and cultural diversity are researched and synthesized. Preq: Athletic Leadership minor. (Non-minors with junior or higher standing and a minimum GPA of 2.3 may request an override to register for this course.)

AL 3500 Scientific Basis of Coaching I: Exercise Physiology 3(3) Increases understanding of basic scientific information concerning athletic performance by using the conceptual approach. Focuses primarily on an in-depth investigation into the physiological principles that can enhance athletic performance. Includes phases of physical training as well as comprehensive evaluative techniques. Preq or concurrent enrollment: AL 3490 or AL 3520 or BIOL 2200 or BIOL 2230.

AL 3510 CPR/AED for Athletic Coaches 1(2) In this course, those with a duty to act learn the skills needed to respond appropriately to cardiac and breathing emergencies. Each participant learns to become a more responsible coach and when and how to safely return an athlete to play. Students also learn to use an Automated External Defibrillator (AED) to care for victims of cardiac arrest, and receive American Red Cross CPR certification in the context of sport safety training as outlined in the National Standards for Sport Coaches.

AL 3520 Scientific Basis of Coaching II: Kinesiology 3(3) Increases understanding of basic scientific information concerning athletic movement by utilizing the conceptual approach. Deals with the basic laws of human motion necessary in evaluation of athletic movement, utilizing joint structure and anatomic landmarks as a basis for motion. Preq or concurrent enrollment: AL 3530 or AL 3500 or BIOL 2200 or BIOL 2230.

AL 3530 Theory of Prevention and Treatment of Athletic Injuries 3(2) Increases understanding of principles involved in the prevention and treatment of athletic injuries. Deals with basic anatomy, first aid, and diagnostic techniques necessary for the understanding of basic athletic training procedures. Preq or concurrent enrollment: AL 3490 or BIOL 2200 or BIOL 2230 or ED 3220 or LS 2750 or LS 2760 or LS 2770 or PRTM 3510. Coreq: AL 3531.

AL 3531 Theory of Prevention and Treatment of Athletic Injuries Laboratory 0(3) Non-credit laboratory to accompany AL 3530. Coreq: AL 3530.

AL 3600 High School Athletics Ethical and Legal Issues 3(3) Investigates ethical and legal issues specific to high school athletic program administration as identified by the National Interscholastic Athletic Administrators Association (NIAAA) Leadership Program and addressed by the National Association for Sport and P.E. (NASPE) National Standards for Sport Coaches. Preq: Completion of or concurrent enrollment in AL 3490; or junior standing with a minimum GPA of 2.3.

AL 3610 Administration and Organization of Athletic Programs 3(3) Study of modern techniques and practices used in administering athletic programs. Emphasizes areas such as practice and game organization, purchase and care of equipment, budget and finances, public relations, and legal liability in athletic programs. Preq or concurrent enrollment: AL 3490 or PRTM 2230 or PRTM 2240.

AL 3620 Psychology of Coaching 3(3) Study of psychological techniques utilized to promote maximum athletic performance. Emphasizes motivation, coaching philosophy, athletic personality, mental preparation, and goal-oriented behavior. Preq or concurrent enrollment: AL 3490 or PSYC 2760 or WFB 3060 or PRTM 2240.

AL 3710 Coaching Baseball 1(3) Increases understanding of basic technical and practical information concerning the coaching of baseball by utilizing the conceptual approach. Students study basic principles of coaching, competitive organization, and proper technical skills needed to improve athletic performances. Also covers total program development as it pertains to specific levels of competition. Preq: Completion of or concurrent enrollment in AL 3490; junior standing with a minimum GPA of 2.3.

AL 3720 Coaching Basketball 1(3) Increases understanding of basic technical and practical information concerning the coaching of basketball by utilizing the conceptual approach. Students study basic principles of coaching, competitive organization, and proper technical skills needed to improve athletic performances. Also covers total program development as it pertains to specific levels of competition. Preq: Completion of or concurrent enrollment in AL 3490; junior standing with a minimum GPA of 2.3.

AL 3730 Coaching Cross Country 1(3) Increases understanding of technical and practical information concerning the coaching of cross country by utilizing the conceptual approach. Students study basic principles of coaching, competitive organization, and proper technical skills needed to improve athletic performances. Also covers total program development as it pertains to specific levels of competition. Preq: Completion of or concurrent enrollment in AL 3490; junior standing with a minimum GPA of 2.3.

AL 3740 Coaching Football 1(3) Increases understanding of basic technical and practical information concerning the coaching of football by utilizing the conceptual approach. Students study basic principles of coaching, competitive organization, and proper technical skills needed to improve athletic performances. Also covers total program development as it pertains to specific levels of competition. Preq: Completion of or concurrent enrollment in AL 3490; junior standing with a minimum GPA of 2.3.

AL 3750 Coaching Soccer 1(3) Increases understanding of basic technical and practical information concerning the coaching of soccer by utilizing the conceptual approach. Students study basic principles of coaching, competitive organization, and proper technical skills needed to improve athletic performances. Also covers total program development as it pertains to specific levels of competition. Preq: Completion of or concurrent enrollment in AL 3490; junior standing with a minimum GPA of 2.3.

AL 3760 Coaching Strength and Conditioning 1(3) Increases understanding of basic technical and practical information concerning the coaching of strength and conditioning by utilizing the conceptual approach. Students study basic principles of coaching, training programs, and equipment appraisal as a means to improve athletic performance. Also covers total program development as it pertains to specific levels of competition. Preq: Completion of or concurrent enrollment in AL 3490; junior standing with a minimum GPA of 2.3.