

School of Agriculture, Fisheries, and Human Sciences

Department of Agriculture
Textbooks for Spring 2010

AGRI 1421, Plant Science, Dr. Mohammad Jalaluddin (Instructor)

Reference:

McMahon, Margaret J., Anton M. KoFranek and Vincent E. Rabatzky
(2007). Hartmann's Plant Sciences: Growth, Development and Utilization of Cultivated
Plants (4th ed.). Upper Saddle, New Jersey.

Course Description: A study of the importance of plant science, principles of crop production
and factors affecting plant growth and development.

AGRI 2301, Agricultural Cooperatives, Ms. Shannon Hendrix (Instructor)

Reference:

Cobia, David (1989). Cooperatives in Agriculture. Prentice Hall.

Course Description: A study of the organization and development of agricultural cooperatives in
the United States. Includes a study of farmer cooperatives in Arkansas.

AGRI 2325, Agriculture Engineering Tech I, Mr. Robert Fitz (Instructor)

Reference:

Herren, Ray (2006). Agricultural Mechanic Fundamentals and Applications
(5th ed.). Cengage.

Course Description: An applied course stressing the importance of planning, placing, and
arranging farm buildings for convenience, sanitation and appearance, the use and cost of
building materials modernizing the farmstead, practice and care of handling of tools arc and
acetylene welding, pipe fitting, elementary electric wiring and repair of household appliances.

AGRI 2326, Introduction to Agricultural Biotechnology, Dr. M. Manoharan (Instructor)

Reference:

Borem, Aluizio, Fabricio Santos and David Bowen (2003). Understanding
Biotechnology (1st ed). Prentice Hall.

Course Description: Introduces students to the many aspects of agricultural biotechnology
including scientific, social, and commercial. The course will focus on the scientific basis of and
methodology used in biotechnology, role of biotechnology in agriculture and the commercial,
ethical and regulatory aspects of biotechnology.

AGRI 3301, Soil Fertility, Dr. Sixte Ntamatungiro (Instructor)

Reference:

Havlin, John L., James O. Beadon, Samuel L. Tisdale and Werner Nelson (2005). Soil
Fertility and Fertilizers: An Introduction to Nutrient Management (7th ed.).
Prentice Hall.

Troeh (2005). Soils and Fertilizers. 6th Edition. Blackwell.

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Course Description: A study of chemical, physical and biological factors affecting productivity, maintenance, and improvement of soil. Covers nutrient deficiency symptoms, fertilizer properties and fertilization practices.

AGRI 3303, Agriculture Finance, Dr. Tracy Dunbar (Instructor)

Reference:

Battles, Ralph, Robert C. Thompson. Fundamentals of Agribusiness Finance (1st ed.). Iowa State University Press.

Course Description: A study of the capital and credit needs of farmers sources of funds necessary to maintain control over the factors of production, cost, terms and risks involved in the use of credit.

AGRI 3304, Small Fruit Production, Dr. Obadiah Njue, (Instructor)

Reference:

Childers. Modern Fruit Science. 10th Edition. Horticulture

Course Description: A study of the principles and practices involved in the production of grapes, strawberries, brambles, and bush fruit.

AGRI 3307, Methods, Media, Teaching, Technology, Dr. Usman Adamu (Instructor)

Reference:

Newcomb, L. H., J. d. McCracken and Warren Brood (2008). Methods of Teaching Agriculture (3rd ed.). Danville, IL: Interstate Printers and Publishers.

Smaldin, Sharon E., et. al. (2005). 9th Edition. Prince Hall, Upper Saddle River, NJ.

Course Description: This course is designed to teach instructional techniques and strategies of teaching agriculture and agriculture related subjects to an individual or group of people. The emphases are on the application and use of computer technology, learning aids/tools teaching and learning principles, group and individual methods of teaching and instructional planning and evaluation.

AGRI 3310, Animal Nutrition, Dr. Ondieki Gekara (Instructor)

Reference:

Pond, Wilson G., David C. Church, Kevin R. Pond and Patrician Schoknecht (2005). Basic Animal Nutrition and Feeding (5th ed.). Wiley Publishers.

Course Description: A study of the principles of animal nutrition and their applications to feeding practice. Also covers food nutrients and their functions.

AGRI 3313, Vegetable Production, Dr. Obadiah Njue (Instructor)

Reference:

Swiader, John W. and George W. Ware. Producing Vegetable Crops (5th ed.). Prentice Hall.

Course Description: The fundamental practices involved in the production of truck crops. Considers classification, production, insect control and marketing vegetables.

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AGRI 3314, Ornamental Horticulture, Dr. Shahidul Islam (Instructor)

Reference:

Ingels (2010). Ornamental Horticulture. 4th Edition. ITP.

Course Description: This is a mid-level horticulture course dealing with general principles and practices in ornamental and landscape horticulture. This course is designed to provide students with basic knowledge in classification of plants, soil nutrients, identification and descriptions of horticultural plants, plant growth regulators, plant reproduction, plant propagation, floral design, interior use of plants, landscape design, turf management, greenhouse and other growing structures and nursery production.

AGRI 3324, Soil and Water Management, Mr. Robert Fitz (Instructor)

Reference:

Schwab, Glenn (1996). Soil and Water Management System (4th ed.). Wiley Publishing Company.

Course Description: A study of the farm shop as related to rural conditions with practical laboratory application; emphasis on simple drawing, blue print reading, leveling terracing, irrigation, drainage, pond and lagoon construction, sewage disposal and sanitation practices as related to the farm and rural home, fencing and measuring land in farm layouts, repair and construction.

AGRI 3327, Introductory Entomology, Dr. Yong Park (Instructor)

Reference:

Elzinga, Richard (2004). Fundamentals of Entomology (6th ed.). Pearson Prentice Hall.

Course Description: Emphasis is placed on insect anatomy, physiology, classification, ecology and identification of the insect orders.

AGRI 3341, Livestock Production, Dr. Ondieki Gekara (Instructor)

Reference:

Gillespie, James R. (2004). Modern Livestock and Poultry Production (7th ed.). Thomson and Delmar Learning.

Course Description: Covers beef cattle, swine and dairy cattle in modern agriculture. This includes breeding, feeding, management practices, judging, control of diseases and parasites and commercial systems of production.

AGRI 3350, Genetics, Dr. Shadrach Okiror (Instructor)

Reference:

Hartl, Daniel L. and Elizabeth W. Jones (2006). Essential Genetics (4th ed.). Jones and Bartlett.

Course Description: Designed to acquaint the student with the genetic make-up of animals and plants. Emphasis placed on the Mendelian Theory as a basis of breeding work. Selection in breeding and crossbreeding discussed from a genetic point of view.

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AGRI 3351, Biostatistics, Dr. Bihu Huang (Instructor)

Reference:

Pagano, Marcello (2000). Principles of Biostatistics (2nd ed.). Duxbury Thompson Learning.

Course Description: Covers statistical theory through practical examples rather than mathematical proofs. The materials covered include computations, applications and interpretations of statistical procedures commonly used in the biological sciences.

AGRI 3352, Introduction to Epidemiology, Dr. Jaheon Koo (Instructor)

Reference:

Friis Robert H. and Thomas A. Sellers. (2010) Epidemiology 101. Jones and Bartlett Publishers, Sudbury, MA.

Course Description: A study of distribution of diseases in human population to describe more completely the natural history of the disease, assist the public health importance of the disease, identify factors in etiology of disease, and evaluates procedures for preventing the spread of disease.

AGRI 3399, Man, Environment and Pollution, Mrs. A. Farmer (Instructor)

Reference:

Cunningham, William P., Mary Ann Cunningham (2009). Principles of Environmental Science (5th ed.). McGraw Hill.

Course Description: An introductory course designed to study interactions between man and his environment. Emphasis is placed on ecological principles, pollution problems, pollution crisis and the resulting depletion of natural resources, criteria for environmental quality and basic technological and social methods of protecting that quality.

AGRI 3V30, Global Perspectives, Mrs. Dorothy Holt (Instructor)

Reference:

Online: www.sharepoint.agriculture.perdue.edu

AGRI 4202, Senior Seminar, Dr. Shadrach Okiror (Instructor)

Reference:

Okiror, Shadrach, Janet Wheat and Peter Perschbacher. Senior Seminar Readings. University of Arkansas at Pine Bluff Printing Services.

Course Description: Presentation of oral and written reports. The Department of Agriculture requires all majors to take this course.

AGRI 4204, Program Planning and Implementation, Dr. Usman Adamu (Instructor)

Reference:

Phipps, Lloyd (1980). Handbook on Agricultural Education.(5th ed.). Danville, IL: Interstate Printers and Publishers.

Course Description: This course deals with the process of planning, developing, implementing, and evaluation of agricultural education courses and programs in

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public schools. The methods of establishing advisory council and program policies, community assessment and public relations, guidance, career exploration, special needs, FFA and SEA are the focus of the course.

AGRI 4321, Quality Assurance Meat, Grain and Prod. (Dr. Dennis Balogu (Instructor))

Reference:

Romans, John R., William J. Costello, C. Wendell Carlson, Marion L. Greaser and Kevin Jones. (2001). The Meat We Eat. (14th ed.). Danville, Illinois: Interstate Publishers, Inc.

Course Description: Designed to outline disease prevention and eradication measures, principles of meat grading and certification; safety and wholesomeness of meat, and the course covers the structures and functions of crop seeds used as food grains according to the national standard and food safety regulations.

AGRI 4352, Agricultural Policy, Dr. Tracy Dunbar (Instructor)

Reference:

Knutson, Ronald D., J. B. Peen, Barry L. Flinchbaugh and Joe L. Outlaw (2007). Agricultural and Food Policy (6th ed.). Upper Saddle River, New Jersey: Pearson Prentice Hall.

Course Description: A study of the capital and credit needs of farmers courses of funds necessary to maintain control over the factors of production, cost, terms and risks involved in the use of credit.

AGRI 4353, Physiology of Reproduction, Dr. Dennis O. Balogu (Instructor)

Reference:

Bearden, H. Joe, John W. Fuquay, Scott T. Willard. Applied Animal Reproduction (6th ed.). Prentice Hall.

A study of endocrine and reproductive systems of farm animals. Hormonal control reproduction and lactation.

AGRI 4361, Interpersonal Skills, Negotiation Tech., Reg. Science, Dr. L. Okiror (Instructor)

Reference:

Durbin, Andrew J. (2007). Human Relations Interpersonal Job Oriented Skills (9th ed.). Prentice Hall.

Fisher, R. and Ury, W. (1991). Getting to YES: Negotiating Agreement Without Giving In (2nd ed.), New York: Penguin Books.

Course Description: A study of principles of effective communication, dynamics of interpersonal behavior and work related task that require various modes of communication. Students will develop self-awareness of preferences and interpersonal differences and an understanding, appreciation and greater tolerance of preferences and differences in others. The course will also include principles related to ethical conduct in conflict identification and resolution.

AGRI 4372, Investigative Proc/Techniques/Reg., Mrs. Alicia Farmer (Instructor)

Reference:

No textbook is required for this course.

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Course Description: Basic concepts of investigative procedures and technique for regulatory agencies. Part I explores the legal basis for investigations. Part II focuses on the identification, collection, and protection of materials of evidential value. Students will be exposed to specialized techniques such as interviewing; note taking, report writing, photography; identification, collection and preservation of evidence. Part III covers the presentation of investigative results to adjudicative body.

GAGRI 6101, Agriculture Environmental Regulatory Practices Seminar, Dr. Muthusamy Manoharan (Instructor)

Reference:

No textbook is required for this course.

Course Description: This course is designed to provide students a forum for presentation of their graduate research project and to provide an opportunity for faculty and agricultural professionals to present seminars relative to issues in agricultural and environmental regulatory affairs. All graduate students are required to take this course during their final semester of enrollment in the graduate program.

GAGRI 6790, Geographical Information Systems Watershed Management, Dr. Edmund Buckner (Instructor)

Reference:

No textbook is required for this course.

Course Description: This course introduces students to the application of geographic information systems (GIS) including cartography, data structure, map overlays, and spatial analysis. This course approaches GIS in the context of environmental issues relating hydrology and watershed management, soil science, land-use planning and conservation.

GAGRI 6V00, Research Thesis (Dr. Muthusamy Manoharan (Instructor)

Reference:

No textbook is required for this course.

Course Description: Graduate students pursuing a master's degree with a thesis option will complete a graduate research project under the supervision of a major advisor and a graduate faculty committee. The advisor and/or committee will decide upon the amount of research/thesis credit that the student will register for each semester in conjunction with the student's graduate research project and thesis work load. This course will be offered every semester.

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AGRI 1101, Regulatory Science/Seminar, Mrs. Alicia Farmer (Instructor)

Reference:

There will not be a textbook required for this course. The instructor will provide reading resources weekly. In addition, students will also be responsible for finding regulatory resources

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and exploring new technology. However, students will need the following items: SAFHS Portfolio binder, CD-R disk/USB drive, computer paper and folders.

Course Description: An introductory course providing an overview of the degree program and its various curricula options. Includes exposure to array of regulatory agencies and issues. A general overview of the regulatory systems, the role and scope of bureaucratic policy making, and efforts to reform regulatory agencies.

AGRI 1301, Foundation of Education/Agri., Dr. Usman Adamu (Instructor)

Reference:

Phipps, Lloyd J. and Edward W. Osborne (1999). Handbook on Agricultural Education in Public Schools. Interstate Printers and Publishers. Danville, IL.

Sadker, M. P. and D. M. Sadker (2000). Teachers, Schools and Society. McGraw-Hill Companies, Inc. New York, NY.

Course Description:

This is an introductory course designed to orient students to agricultural education and the public education system. Major emphases are on basic concepts, philosophies, objectives and values of agricultural education in particular and public education system in general. Important historical, legislative, organizational and support systems will be studied and discussed.

AGRI 1321, Animal Science, Dr. Dennis O. Balogu (Instructor)

Reference:

Shapiro, Leland (2006). Introduction to Animal Sciences (W/CD). Prentice-Hall. New Jersey.

Damron W. Stephen. Introduction to Animal Science: Global, Biological, Social and Industry Perspectives (3rd ed.). Oklahoma State University.

Course Description: A basic study of the science of farm animals involving the following areas: classification, feeding principles, fundamental principles of physiology, judging, diseases and their control, and the animal and associated industries.

AGRI 2310, Plant Pathology, (Dr. Md. Jalaluddin (Instructor)

Reference:

Agrios, George N., (2005), Plant Pathology, Academic Press/Elsevier.

Course Description: Fungi, bacteria, virus and nematodes, mineral deficiencies and mechanical injuries causing abnormal growth and development of domesticated plants.

AGRI 2311, Introduction to Agri. Engineering, Mr. Robert Fitz (Instructor)

Reference:

Herren, Ray V. (2006). Agriculture Mechanics Fundamentals and Applications (5th ed.). Cengage Delmar Learning.

Course Description: Selection, use and care of farm tools and fish pond equipment, estimation and figuring bills of materials; soldering, woodworking; and metal working.

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AGRI 2312, Principle Agricultural Economics, Ms. Shannon Hendrix (Instructor)

Reference:

Person, Capps, Rosson and Woodard (2006). Introduction to Agricultural Economics (4th ed.). Prentice Hall.

Course Description: Introduces basic concepts and theories that apply principles of economics to the everyday problems of agriculture.

AGRI 2331, Introductory Soils, Dr. Sixte Ntamatungiro (Instructor)

Reference:

Bennett, William F., Cary J. Green, Aga Ravzi (2008). Soil Science Simplified (5th ed.). Wiley-Blackwell.

AGRI 3101, Agricultural Education Seminar, Dr. Usman Adam (Instructor)

Reference:

Newcomb, L. H., J. D. McCracken and J. R. Warmbrod (1986). Methods of Teaching Agriculture. Interstate Printers and Publishers. Danville, IL.

Landson-Billings, Gloria (1997). Dreamkeepers: Successful Teachers of African-American Children. Jossey-Bass Publishers. San Francisco, CA.

Journal of Agricultural Education (Available Online)

Agricultural Education Magazine (Available in Watson Library)

Course Description: A study of current and emerging issues in agricultural education related to cultural/ethnic diversity, classroom/laboratory environment, supervised agricultural experiences, and Future Farmers of America/youth leadership. Emphases are placed on the areas of need of students in the classroom.

AGRI 3231, Rural Electrification, Mr. Robert Fitz, (Instructor)

Reference:

Herren, Ray V. (2006). Agriculture Mechanics Fundamentals and Applications (5th ed.). Cengage Delmar Learning.

Course Description: A study of current and emerging issues in agricultural education related to cultural/ethnic diversity, classroom/laboratory environment, supervised Agricultural experiences and Future Farmers of America/Youth Leadership. Emphases are placed on the areas of need of students in the classroom.

AGRI 3301, Soil Fertility, Dr. Sixte Ntamatungiro (Instructor)

Reference:

Harlin, John L., James O. Beadon, Samuel L. Tisdale and Werner Nelson (2005). Soil Fertility and Fertilizers: An Introduction to Nutrient Management (7th ed.). Prentice Hall.

Course Description: A study of chemical, physical and biological factors affecting productivity, maintenance and improvement of soil. Covers nutrient symptoms, fertilizer properties and fertilization practices.

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AGRI 3302, Plant Propagation, Dr. Muthusamy Manoharan (Instructor)

Reference:

Hartman, H. T., D. E. Kester, F. T. Davies, Jr. and R. L. Geneve (2002). Plant Propagation: Principles and Practices. 7th Edition. Prentice Hall, Upper Saddle River, NJ.

Course Description:

A study of the principles and methods involved in the seed propagation of woody and herbaceous plants. These include: division, layering, cutting, budding and grafting.

AGRI 3306, Weed Science, Dr. Shadhidul Islam (Instructor)

Reference:

Ross, Merrill A. and Carole A. Lembi (2009). Applied Weed Science (3rd ed.). Prentice Hall. New Jersey.

Course Description: An introductory weed science course on weed identification; efficient control by chemical, biological and cultural methods; and the effect of herbicides on weeds.

AGRI 3310, Animal Nutrition, Dr. Ondieki J. Gekara (Instructor)

Reference:

Pond, W. G., D. C. Church, K. R. Pond and P. A. Schoknecht (2005). Basic Animal Nutrition and Feeding (5th ed.). John Wiley & Sons, Inc. Hoboken, New Jersey.

Course Description: A study of the principles of animal nutrition and their applications To feeding practice. Also covers food nutrients and their functions.

AGRI 3312, Administrative Law, Gov. Proceedings, Mrs. Alicia Farmer (Instructor)

Reference:

Hall, Daniel E. (2006). Administrative Law: Bureaucracy in a Democracy (3rd ed.). Prentice Hall, New Jersey.

Course Description: Overview of the powers delegated to a regulatory agency by legislative body and an analysis of the limits placed on the powers and actions regulatory agencies using previous court cases and Administrative Procedures Act. Particular emphasis is given the legislative and judicial power delegated by the U.S. Congress to Federal agencies and the control and limits the powers of the agencies.

AGRI 3316, Agriculture Engineering Tech II, Mr. Robert Fitz (Instructor)

Reference:

Herren, Ray V. (2006). Agriculture Mechanics Fundamentals and Applications (5th ed.). Cengage Delmar Learning.

Course Description: A study of the principles as applied to mechanical work on the farm, including gas and diesel engines, field machinery and equipment, selection and cost of farm machinery. Laboratory practice in adjustment operation, servicing and housing farm machinery and equipment.

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AGRI 3325, Agricultural Marketing, Dr. Tracy V. Dunbar (Instructor)

Reference:

Schrimper, Ronald (2001). The Economics of Agricultural Markets. Prentice Hall.
Upper Saddle River, New Jersey.

Course Description: A study of the marketing system and processes for agricultural products; involves the functions, institutions and behavior of key agents in the system.

AGRI 3326, Science of Crop Production, Dr. Mohammad Jalaluddin, (Instructor)

Reference:

Acquaah, George (2004). Principles of Crop Production: Theory, Techniques and
Technology. Prentice Hall. New Jersey.

Course Description: Basics principles and practices of crop production and management, factors affecting production and protection of crops, crop classification, innovations in Agronomy and Agro-forestry, and economic importance of crop production in global perspectives.

AGRI 3432, Soil Survey/Classification, Dr. Sixte Ntamatungiro (Instructor)

Reference:

Buol, S. W., R. J. Southard, R. C. Graham and P. A. McDaniel (2003). Soil Genesis
and Classification. Iowa State University Press, Ames, Iowa.

Course Description: The soil as a natural body. Factors and process of soil formation, morphology and classification, soil survey methods and soil patterns.

AGRI 4301, Soil and Plant Analysis, Dr. Sixte Ntamatungiro (Instructor)

Reference: Handouts

Course Description: Covers principles and methods of quantitative chemical analysis of soils and plants for available and total nutrients.

AGRI 4304, Plant Physiology, Dr. Muthusamy Manoharan (Instructor)

Reference:

Hopkins, W. G. and N. P. A. Huner (2009). Introduction to Plant Physiology, 4th Edition.
J. Wiley and Sons.

Course Description: Physiological processes of plants. The factors influencing them and the relationship of these processes to plant behavior. Respiration, photosynthesis, transportation, etc., are explored in detail.

AGRI 4307, Post-Harvest Physiology, Dr. Shahidul Islam (Instructor)

Reference:

Wills, R., B. McGlasson, D. Graham and D. Joyce. 2004, Post-harvest: An Introduction
to the Physiology and Handling of Fruits, Vegetables and Ornamentals.

Course Description: This course will provide a fundamental understanding of post-harvest physiology, handling and technology. The aim of the course is to provide a basic understanding of structure, physiology and biochemistry of horticultural produce in relation to post-harvest

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handling and storage. The importance of pre-harvest factors and genetic material, as well as, environmental conditions and handling during distribution and storage periods is considered.

AGRI 4321, Quality Assurance Meat, Grain and Prod. (Dr. Dennis Balogu (Instructor))

Reference:

Romans, John R., William J. Costello, C. Wendell Carlson, Marion L. Greaser and Kevin Jones. (2001). The Meat We Eat. (14th ed.). Danville, Illinois: Interstate Publishers, Inc.

Course Description: Designed to outline disease prevention and eradication measures, principles of meat grading and certification; safety and wholesomeness of meat, and the course covers the structures and functions of crop seeds used as food grains according to the national standard and food safety regulations.

AGRI 4331, Risk Communication/Assess, Mrs. Alicia Farmer, (Instructor)

Reference:

Lungren, Regina and Andrea McMakin. Risk Communications (3rd ed.). Battelle Press.

Course Description: Provide a general overview of principles and techniques related to Risk Assessment and Communications in regulatory environments. Students will understand the concepts of risk identification and assessment, and open risk communication.

AGRI 4385, Industrial/Agri/Mun/Pollution, Dr. Edmund Buckner (Instructor)

Reference:

Nathanson, Jerry A. P. E. (2002). P. E. Basic Environmental Technology: Water Management and Pollution Control (4th ed.) . Prentice Hall Publishing.

Course Description: an applied science course focusing on educating students about pollution and waste treatment technologies using biological and chemical process to clean up pollution will be studied.

AGRI 4401, Food Science and Technology, Dr. Jaheon Koo, (Instructor)

Reference:

Parker, Rick (2003). Introduction to Food Science. Delmar, Albany, NY.

Course Description: Food Science and Technology course provides a comprehensive application of up-to-date topics in food science and technology. This course covers the interdisciplinary nature of food science, including biology, engineering, chemistry, microbiology, nutrition and physics in all major food commodities. This course helps students apply their knowledge to contributory sciences to thinking critically about the core topics in food science and technology.

AGRI 4411, Farm Management, Dr. Tracy V. Dunbar (Instructor:

Reference:

Kay, Ronald D. and Williams M. Edwards (2008). Farm Management (6th ed.). McGraw Hill Series in Agricultural Economics.

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Course Description: A study of principles and problems in the organization and operation of a farm as a business unit, including types of farms, layouts, enterprise combinations, nature of farming, cost and adjustments to price changes.

AGRI 4V00, Special Problems, Dr. Tracy V. Dunbar (Instructor)

Reference:

No textbook is required for this class.

Course Description: Covers special problems, policies and investigations pertaining to agriculture. This course is independent study usually with the students' advisor.

GAGRI 5400, Molecular Biology, Dr. Muthusamy Manoharan (Instructor)

Reference:

Malacinski, G. M. (2003). Essentials of Molecular Biology, 4th Edition, Jones and Barlett Publishers, Boston, MA.

Course Description: Molecular biology provides an overview of basic molecular process and recombinant DNA technologies that play an important role in forensics, therapeutics, drug discovery and agriculture. This includes: structure and function of DNA, RNA and proteins: DNA replication and repair processes; RNA synthesis and processing; protein synthesis and regulations; and basic combinant DNA technology.

GAGRI 6000, Agricultural and Environmental Regulation Practice Seminar,
Dr. Muthusamy Manoharan (Instructor)

Reference:

No textbook is required for this class.

Course Description: This course is designed to provide students a forum for presentation of their graduate research project and to provide an opportunity for faculty and agricultural professionals to present seminars relative to issues in agricultural and environmental regulatory affairs. All graduate students are required to take this course during their final semester of enrollment in the graduate program.

GAGRI 6420, Food Microbiology, Dr. Jaheon Koo, (Instructor)

Reference:

Jay, James M., Martin J. Loessnaer and David A. Golden (2006). Modern Food Microbiology, 7th Edition. New York, NY.

Course Description: This course provides an overview of the role of microorganisms in food spoilage, food safety, food processing, food preservation, food borne illness and food intoxication. This course is meant as a basic laboratory course in food microbiology and safety.

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Textbooks for Spring, Summer & Fall 2010**

AQFI* 2329*01 Aquaculture

Aquaculture: Farming Aquatic Animals and Plants. 2003 Ed. J. S. Lucas and P.C. Southgate. Blackwell Publishing

AQFI* 2462*01 Ichthyology

Fishes: An Introduction to Ichthyology. 2004 Fifth Ed. Moyle and Cech. Pearson Educ (Prentice Hall)

AQFI* 3360*01 Hatchery Management

No Textbooks

(Reference Material) - Fish Hatchery Management. 2002 Second Ed. G. A. Wedemeyer. American Fisheries Society, Bethesda, MD

AQFI* 3371*01 Fisheries Management

Inland Fisheries Management In North America. 1999 Second Ed. Kohler. American Fisheries Society

AQFI* 4201 01 Senior Seminar

Senior Seminar Readings. 2001 Ed. Perschbacher. UAPB Print Shop

GAQF* 5300*01 Research Methods & Scientific Writing

(Reference Material)- How to Write & Publish a Scientific Paper. 1998 Ed. Day, R.A. Oryx Press, Phoenix, AZ

GAQF* 5310*01 Program Eval/Survey Methods

(No Textbooks)

(Reference Material)- Sampling of Populations: Methods of Applications. Paul S. Levy and Stanley Lemeshow. 4th Ed. Wiley

(Reference Material)- Survey Methodology. Robert M. Groves, Floyd J. Fowler, Jr, Mick P. Couper, James M. Lepkowski, Eleanor Singer, and Roger Tourangeau.

Second Ed. Wiley

GAQF* 5406*01 Univar/Multivar Model/Fish/Sc

Applied Multivariate: Methods for Data Analysts. Dallas E. Johnson. Duxbury. 1998

GAQF* 5415*01 Ecology of Fishes

Biology and Ecology of Fishes. James S. Diana. Second Ed. Cooper

GAQF* 5430*01 Fish Health Protection

(No Textbooks)

GAQF* 5435*01 Management of Small Impoundment

(No Textbooks) Varies References

Summer I 2010

GAQF* 5220*01 Engineer/Constr/Aqua/Faci/I

(No Textbooks)

GAQF* 5208*01 Nonparametric Methods/Data Analysis

Introduction to Modern Nonparametric Statistics. 2004 First Ed. Higgins. Science and Math

SAS Companion for Nonparametric Statistics. 2006 First Ed. Richter/Higgins. Science and Math

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Summer II 2010

GAQF* 5221*01 Engineer/Constr/Aqua/Faci/II

(No Textbooks)

GAQF* 5315*01 Aquaculture Extension

(No Textbooks)

Fall 2010

AQFI* 1102*01 Topics/Aquaculture/Fisheries

(No Textbooks)

AQFI* 2247*01 Fisheries Techniques

Fisheries Techniques. 1996 Second Ed. Murphy. American Fisheries Society

AQFI* 2253*01 Biology of Fishes

(No Textbooks)

AQFI* 3329*01 Limnology

Applied Aquatic Ecosystem Concepts. 2004 Second Ed. Mackie.

AQFI* 4321*01 Econ. Of Aquaculture

(No Textbooks)

Suggested Reading – Aquaculture Marketing Handbook. 2006. Engle C. R. and K. Quagrainie. Blackwell Publishing

AQFI* 4336 and GAQF*5336 Aquatic Animal Nutrition

Nutrient Requirements in Feeding of Finfish. 2002. Webster

Nutrient Requirements of Fish (Available free online)

GAQF* 5405*01 Statistics in Research

Biostatistical Analysis. 1999 Fourth Ed. Jerrold H. Zar. Prentice Hall, Upper Saddle River, New Jersey

Applied Statistics and the SAS Program Language. 2006 Fifth Ed. Ronald P. Cody and Jeffery K. Smith. Prentice Hall, Upper Saddle River, New Jersey

Statistics for Aquaculture. 2009. R. C. Bhujel

GAQF* 5322*01 Aquaculture Economics

Aquaculture Marketing Handbook. 2006. Engle C. R. and K. Quagrainie. Blackwell Publishing

GAQF* 5422*01 Fish Physiology

Physiology of Fishes. 2006 third Ed. D. H. Evans and J.B. Claibourne. CRC Press, Taylor and Francis Group, Boca Raton, FL

GAQF* 5445*01 Stream Ecology (**May Change**)

Stream Ecology: Structure and Function of Running Waters. J. David Allen Kluwer Academic Publishers

GAQF*5325*01 Fish Population Dynamics

(No Textbooks)

GAQF*5440*01 Water Quality

Water Quality in Ponds for Aquaculture. 1990. Boyd. Auburn University

Water Quality & Pond Soil Analysis for Aquaculture. 1992. Boyd. Auburn University

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Department of Human Sciences
Textbooks for Spring, Summer & Fall 2010

HUSC 1102*01

Foundations of Family & Consumer Sciences, Kato, 2008, ISBN: 9781590708125, GW

HUSC 1311*01

Nutrition,Sizer, 11th Edition 2008, ISBN: 9780495390657, ITP

HUSC 1312*01

Pizzuto's Fabric Science (Binder w/2 Swatch Pkg), Price, 9th Edition, ISBN: 9781563678578
Fairchild

Pizzuto's Fabric Science (Binder), Price, 9th Edition 2009, ISBN: 9781563678554, Fairchild

HUSC 2300*01

Marriages & Families, Lamanna, 10th Edition 2009, ISBN: 9780495390923, ITP

HUSC 2321*01

Wardlaw's Perspectives in Nutrition, Byrd-Bredbenner, 8th Edition 2008, ISBN: 9780077263201,
MCG

HUSC 2342*01

Business of Fashion, Burns, 3rd Edition 2007, ISBN: 9781533675706, Fairchild

HUSC 2433

Professional Cooking (w/CD), Gisslen, 7th Edition 2010, ISBN: 9780470197523

HUSC 2436*1C

Preschool Application Packet, Coear

Essence for Child Development Associates Etc, 2nd Edition 2004, ISBN: 9780975914007, Coear

HUSC 3311*01

Foodservice Organizations, Gregoire, 7th Edition 2010, ISBN: 9780135060551, PH

HUSC 3330*01

Creative Activities for Young Children (Set:Txt/Johnson), Mayesky, 9th Edition 2009, ISBN:
9781428321830

HUSC 3331*01

Advanced Nutrition & Human Metabolism, Gropper, 5th Edition 2009, ISBN: 9780495116578,
ITP

HUSC 3341*01

Process of Parenting, Brooks, 7th Edition 2008, ISBN: 9780073131450, MCG

HUSC 3352*01 Advanced Textiles

Quality Assurance for Textiles and Apparel, Kadolph, Sarah, 2nd Edition, Fairchild

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HUSC 3352*01

Going Global: The Textile & Apparel Industry, Kunoz, Grace & Garner, Myrna B.

100 Years of Li & Fang: Rise from Family Business to Multinational, Feng-Bang-Yan

HUSC 3364*01

Infants & Toddlers (Set:Txt/Swim Prof ENH Bk), Watson, 6th Edition 2008, ISBN: 9781418050634, ITP

HUSC 3366*01

Focus on Personal Finance, Kapoor, 2nd Edition 2008, ISBN: 9780073530635, MCG

HUSC 3420*01

Foods: Experimental Perspectives, McWilliams, 6th Edition 2008, ISBN: 9780131568532, PH

HUSC 4312*01

Principle of Food ... Cost Controls (w/CD), Dittmer, 9th Edition 2009, ISBN: 9780471783473, Wiley

HUSC 4329*01

Assessment in Early Childhood Education, Wortham, 5th, 2008, ISBN: 9780132329149, PH

HUSC 4332*01

Patternmaking for Fashion Design (Notebook), Joseph-Armstrong, 4th Edition, 2006, ISBN: 9780131112117, PH

Your Personal Style, Plummer, Nancy, ISBN: 9781563675904, Fairchild

HUSC 4341*01

Krause's Food & Nutrition Therapy, Mahan, 12th Edition 2008, ISBN: 9781416034018, SNDRS

HUSC 4361*01

Family Ethnicity, McAdoo, 2nd Edition, 1999, ISBN: 9780761918578, SAGE

School of Arts and Sciences

Department of Art
Textbooks for Spring, Summer & Fall 2010

ART 3309 Desktop Publishing

Williams, Robin. 2008. The Non-Designers Design Book. (3rd Edition)

Course Description: This introductory course involves the application and use of computers for the creation and manipulation of type and graphic images. Emphasis will be on a desktop publishing application (Adobe InDesign) with an introduction to photo-imaging and scanning (Adobe Photoshop). At the completion of the course you will have a firm grasp on some of the tools used for desktop publishing and an understanding of the fundamentals of designing page layouts.

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ART 3310 Graphic Design I

Landa, Robin. 2006. Graphic Design Solutions. (3rd Edition)

Course Description: Introductory course that covers the tools, techniques, and processes associated with Graphic Design problem solving, with an emphasis on typography. Course content includes experience with typography, symbol development, layout design, color application and printing, utilizing Adobe Illustrator, InDesign and Photoshop on the Macintosh computer. Students will be introduced to the commercial printing processes and the preparation of artwork for printing will be discussed.

ART 4307 Graphic Design II

Landa, Robin. 2006. Graphic Design Solutions. (3rd Edition)

Course Description: Intermediate course which further explores the fundamentals of graphic design as they relate to modern graphics problems. Graphic Design II students will continue to develop design and computer skills learned in Graphic Design I while working on more advanced projects involving the application of typography and graphics to solve design problems.

ART 3302 Photography I

London, B., Stone, J. A Short Course in Photography: An Introduction to Black and White Photographic Technique. 7th edition. Prentice Hall, 2009.

Course Description: This introductory course acquaints the student with basic black and white photography and darkroom techniques and equipment. Course will cover 35mm SLR manual camera operations, as well as film developing and print processing. Students will work on projects that emphasize technical and conceptual aspects of photography as a visual art.

ART 4324 Web Design

Gaskill, Dennis. 2008. Web Site Design Made Easy. (3rd Edition)

Course Description: This course will involve the use of Adobe Dreamweaver to create Hypertext Markup Language (HTML) based web pages with an emphasis on design issues specific to the web. Students will continue to use other graphic design tools including Adobe Photoshop. Assignment criteria will emphasize the development of aesthetics, personal expression, critical thinking and technical competence.

Art 3360, Contemporary Art History, Mr. Husny Dahlan (Instructor)

Reference:

Arnason, H. H., and Kalb, Peter (2003). History of Modern Art. (5th ed.)
United States: Pearson

Course Description: The study of major artistic and historical developments in modern art from the mid 19th century to the present with emphasis on painting, sculpture and architecture.

Art 4310 & 4312 , Ceramics I & II, Mr. Husny Dahlan (Instructor)

Reference:

Peterson, Susan and Jan (2002) Working with Clay (2nd. ed.)

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Prentice Hall

Course Description: An introduction to the study of ceramics ranging from hand-building and wheel throwing techniques to glazing and firing.

ART 2340, Art Appreciation and History, Husny Dahlan (Instructor)

Reference:

Lewis, Richard and Lewis, Susan I. (2009). *Living The Power of Art* (2nd ed). United States: Cengage

Course Description: An historical survey course, covering the periods from Paleolithic through the 20th Century, with emphasis on the understanding and appreciation of architecture, sculpture, painting, the graphic arts and the minor arts.

Art 2310, 3-D Design, Husny Dahlan (Instructor)

Reference:

Stewart, Mary. *Launching the Imagination*, 3rd edition (2008). New York: McGraw Hill

Course Description: Art 2310 is an introductory course to the fundamentals of three dimensional design. The object of this course is to actively involve students in developing a broad range of technical and conceptual skills in creating functional and sculptural objects.

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Art 3313, Sculpture I, Husny Dahlan (Instructor)

Reference:

Kelly, James J. *The Sculptural Idea*, 4th ed., Waveland, Inc. 2003

Course Description: is an introductory course in the development modern sculpture. The course is designed to provide students with material and technical explorations in a process oriented approach to making sculpture.

Art 4348/49, Art History Survey I & II, Mr. Husny Dahlan (Instructor)

Reference:

Kleiner, Fred S. and Mamiya, Christine J. (2008). *Gardner's Art Through the Ages* (13th ed.) United States: Cengage.

Course Description: A survey of major artistic traditions and historical developments in painting, sculpture and architecture from prehistory to the present.

ART 2340, Art Appreciation and History, Husny Dahlan (Instructor)

Reference:

Lewis, Richard and Lewis, Susan I. (2009). *Living The Power of Art* (2nd ed). United States: Cengage

Course Description: An historical survey course, covering the periods from Paleolithic through the 20th Century, with emphasis on the understanding and appreciation of architecture, sculpture, painting, the graphic arts and the minor arts.

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Art Appreciation & History (Dr. William R. Detmers)

Reference:

Lewis & Lewis, The Power of Art, Wadsworth

African American Art History (Dr. William R. Detmers)

Reference:

New Negro Artists in Paris, Leininger-Miller, Rutgers U. Press

African-American Art, Patton, Oxford

Children's Art Methods, Emphasis Art (Dr. William R. Detmers)

Reference:

Art Methods in Secondary Schools, (Dr. William R. Detmers)

Art & Adolescence, Michael, Teachers College Press

Art Synectics, Roukes, Davis

Printmaking I (Dr. William Detmers)

Reference: In-house lab manual

Printmaking II (Dr. William Detmers)

Reference: In-house lab manual

Department of Biology
Textbooks for Spring, Summer & Fall 2010

Animal Diversity, Hickman, 5th Edition, ISBN: 978007296450, MCG

General Zoology, General Zoology Lab Guide, Lytle, 15th Edition, ISBN: 9780073051628, MCG

Parasitology, Foundations of Parasitology, Roberts, 8th Edition, ISBN: 9780073028279, MCG

Human Anatomy and Physiology, Hole's Human Anatomy and Physiology, 11th Edition, Shier, ISBN: 9780073316093, MCG

Human Anatomy and Physiology, Human Anatomy and Physiology Lab, 11th Edition, Shier, ISBN: 9780077283773, MCG

Ecology, Ecology and Field Biology, 6th Edition, Smith, ISBN: 9780321042903, Benjamin C.

Genetics, Genes, 9th Edition, Benjamin Lewin, ISBN: 9780763740634, ITP

Microbiology, Principles of Microbiology, 13th Edition, Wheeler, ISBN: 978076710750, MCG

Benson's Microbiological Appl: Short Vers, 11th Edition, Brown, ISBN: 9780073522548

Biological Science, Essentials of Biology, 2nd Edition, Mader, 9780077280093, MCG

Biological Science, Essentials of Biology Lab, 2nd Edition, Mader, 9780077234256, MCG

Pathophysiology, Human Physiology, 11th Edition, Fox, 9780077265878, MCG

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Experiments in Physiology Lab, 9th Edition, Tharp, ISBN: 9780321652195,

General Botany, Introductory Plant Biology, 11th Edition, Stern, ISBN: 9780073040523, MCG

Introductory Plant Biology Lab, 11th Edition, Stern, ISBN: 9780072830682, MCG

Pharmacology, 5th Edition, Hitner, ISBN: 9780073122755, MCG

Principles of Biology, Biology, 8th Edition, Solomon, ISBN: 9780495107057, ITP

BC Symbiosis/UAPB, Marks, ISBN: 9780536792273, PH

Histology, Histology (W/VERS 1.0 CD), 5th Edition, Ross, ISBN: 9780781772211; LIPWW

Department of Chemistry & Physics
Textbooks for Spring, Summer & Fall 2010

Physical Science

Introduction to Physical Science, Shipman, Wilson, Todd, Houghton Mifflin, 12th
Survey of the physical science for the non-science major. It covers the disciplines of physics, chemistry and astronomy. This course is part of the general education program

Biochemistry

Biochemistry, Jeremy L. Berg, John L. Tymoczko and Lubert Stryer, W.H. Freeman Co., 6th
This is a one semester introductory Biochemistry course designed for students majoring in Biology, Chemistry and Dietetics. It may also be useful to students majoring in the Agricultural Sciences. The chemistry and biochemistry of proteins, carbohydrates, lipids and nucleic acids are covered. Enzyme function, enzyme kinetics and enzyme regulation are also covered.

Physical Chemistry

Physical Chemistry, David W. Ball Thomson, Brooks/ Cole, 1st
This is the first part of a two course sequence in Physical Chemistry. The course is designed for chemistry majors and is calculus-based. Primary focus is on chemical thermodynamics. Topics covered include ideal and nonideal gas behavior, the laws of thermodynamics, enthalpy, entropy, free energy, chemical equilibrium, and phase changes

Principles of Chemistry

Introductory Chemistry For Today, Spencer L. Seager & Michael R. Slabaugh, Thomson/Brooks/Cole, 6th
This course gives a brief description of the laws governing inorganic, organic, and biochemistry. Considered to be a terminal sequence for students majoring in nursing or allied health sciences

Organic Chemistry

Organic Chemistry, Solomon & Fryhle, John Wiley, 9th
This course is designed to explore the structure, bonding, synthesis, physical and chemical properties and uses of organic compounds that will include hydrocarbons such as alkanes,

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alkenes and alkynes. Chemistry of alkyl halides, alcohols and ethers will also be covered. Also, radical reactions as well as spectroscopic methods of structure determination will be introduced.

General Chemistry

Chemistry, Raymond Chang, McGraw Hill, 10th

Introduces the basic laws and theories of chemistry with emphasis on the preparation, properties and uses of the selected non-metals.

Inorganic Chemistry

Inorganic Chemistry, Gary L. Miessler Donald A. Tarr, Prentice Hall, 3rd

Explores, from a quantum mechanical point of view, atomic and molecular structures, periodic relationships and chemical bonding.

Quantitative Analysis

Quantitative Chemical Analysis, Gary Christian, Wiley, 6th

Explores volumetric and gravimetric analysis. Heavy emphasis placed on the collection, treatment and interpretation of analytical data

Intro to Astronomy

Discovering the Universe, Neil F. Comins, William J. Kaufmann III, W.H. Freeman & Co, 7th

This course is designed to give students the concepts of the building blocks of the universe at large planets, satellites, stars and galaxies in the light of the fundamental laws of physics.

Further the course discusses the regular & exotic phenomena occurring in our solar system and elsewhere in the universe during the evolutionary stages of the heavenly objects.

University Physics

Physics for scientists & engineers with modern physics, Serway/Jewett, Brooks/Cole, 7th

This course covers the calculus base physics which contains electricity, magnetism, optics and modern physics. It deals in the general idea about Physics, such as Electric Field, Electrostatic Force, Potential, Capacitor, Current, Potential Difference, Resistance, Circuit Analysis, Magnetic Field, Force Exerted by Magnetic Field on Charge Particle, Induction, Inductance, Transformer, Concept of AC, Phasor Diagram, Geometrical and Physical Optics, Introduction to Modern Physics.

General Physics

Physics, Giancoli, Prentice Hall, 6th

Gives the student the general idea about Physics, such as measurement of physical quantity, Motion, Force, Work, Energy, Moment of Inertia, Torque, Momentum, Collision, Fluid Mechanics, Material, Thermodynamics, Sound and Waves.

Department of English, Theatre and Mass Communications
Textbooks for Spring, Summer & Fall 2010

Note: Italicized textbooks represent additional readings.

1310 Basic English – Ms.Sonia Shahjahan, Mrs. Patricia Meadows, Ms. Janice Brantley, Mrs. Vivian Adzaku, Mrs. Mary M. Lynch, Dr. Floyd Goodwyn, Ms. Sonia Shahjahan, Adjunct Listed as Staff (Instructors) – Used All Semesters

1310 Basic English (WEB) – Ms. Adrienne Oliver, Ms. Letrishe Y. Hence, Adjunct (Instructors)

References:

Henry, D.J., Writing for Life: Paragraph to Essay , Pearson/Longman Publishers.
ISBN: 13:978-0-321-41367-3(Instructor's edition), ISBN:10: 0-321-41367-9(Instructor's ed.), ISBN:13:978-0-321-39231-0 (Student ed.), ISBN:10 0-321-39231-0 (Student's ed.). (Used All Semesters)

Description: D.J. Henry's goal for this text is to reach today's students. Through the use of real-life situations. Henry shows students how and why writing is an essential life skill and reaches them by answering the question so many students ask: "What's the point?" Additionally, through a groundbreaking design developed in conjunction with Dorling Kindersley, Henry makes the writing, reading, and thinking processes visible, reaching today's visually oriented students by showing students the processes rather than just discussing them. Unique visual representations of the writing process and highly graphic layouts make the instruction accessible to developing writers, empowering them to transfer the learning strategies they already use in interpreting the visual world to the task of writing.

My Writing Lab. 053653439x – Used All Semesters

Achebe, Chinua, *Things Fall Apart*, Bantam Doubleday Dell.

Description: One of Chinua Achebe's many achievements in his acclaimed first novel, *Things Fall Apart*, is his relentlessly unsentimental rendering of Nigerian tribal life before and after the coming colonialism. First published in 1958, just two years before Nigeria declared independence from Great Britain, the book eschews the obvious temptation of depicting pre-colonial life as a kind of Eden. Instead, Achebe sketches a world in which violence, war, and suffering exist, but are balanced by a strong sense of tradition, ritual, and social coherence. His Ibo protagonist, Okonkwo, is a self-made man. The son of a charming ne'er-do-well, he has worked all his life to overcome his father's weakness and has arrived, finally, at great prosperity and even greater reputation among his fellows in the village of Umuofia. Okonkwo is a champion wrestler, a prosperous farmer, husband to three wives and father to several children. He is also a man who exhibits flaws well-known in Greek tragedy...-Adapted from editorial review by Alix Wilber.

Gaines, *Bloodline*, Random House, Inc.

Description: In these five stories, Gaines returns to the cane field, sharecroppers' shacks, and decaying plantation houses of Louisiana, the terrain of his great novels *A Gathering of Old Men* and *A Lesson Before Dying*. As rendered by Gaines, this country becomes as familiar, and as haunted by cruelty, suffering, and courage as Ralph Ellison's Harlem or Faulkner's Yoknapatawpha County. Stories include *A Long Day in November*, *The Sky Is Gray*, *Three Men*, *Bloodline*, and *Just Like a Tree*.

Steinbeck, *Of Mice and Men*, Penguin Putnam, Inc.

Description: Is a novella by Nobel Prize winning author John Steinbeck, first published in 1937, which tells the tragic story of George Milton and Lennie Small, two displaced Anglo migrant ranch workers in California during the Great Depression. (Adapted from Wikipedia, the free encyclopedia)

1311 English Composition I , Ms. Janice Brantley, Ms. Sonia Shahjahan, Ms. Ellen Nichol, Dr. Floyd Goodwyn, Mrs. Vivian Adzaku (Instructors) – Used All Semesters

1311 English Composition I WEB – Ms. Letrishe Y. Hence (Instructor)

Reference:

Faigley, Lester, Backpack Writing: Reflecting, Arguing, Informing, Analyzing, Evaluating (2008). Pearson/Longman. (1st edition). ISBN-13:978-0-20555830-8. (Used Fall and Summer 2009)

Description: Backpack Writing helps students achieve four goals: 1) Rhetorical Knowledge 2) Critical thinking, reading, and writing 3) Processes 4) knowledge of conventions. These goals are achieved by using a combination of concise, accessible instruction, visual explanations, helpful examples, and appealing assignments and readings in an easy-to-carry portable format. Important concepts and processes are presented in concise spreads, letting students see at a glance the key points they should master.

Angelou, Maya. *I Know Why the Caged Bird Sings*. Bantam Doubleday Dell.

About this title: In this first volume of her celebrated collection of memoirs, the poet Maya Angelou describes in vivid, lyrical detail her childhood as a young black girl in the South.

Wharton. *Ethan Frome*. Penguin Putnam, Inc.

Description: This is a curious and slender volume first published in 1911, is one of the few pieces of Wharton's fiction that does not take place in an urban, upper-class setting. The novel is all the more remarkable for its austere and penetrating impressions of rural working-class New England, especially given that its author was a woman of leisure, living in the comfort of her Paris salon. Wharton based the narrative of *Ethan Frome* on an accident that had occurred in Lenox, Massachusetts, where she had traveled extensively and had come into contact with one of the victims of the accident. Wharton found the notion of the tragic sledding crash to be irresistible as a potential extended metaphor for the wrongdoings of a secret love affair.

1311 English Composition I/Honors – Dr. Carolyn Blakely (Instructor) – Used Fall/Spring Semesters

Reference:

Reinking. Strategies for Successful Writing & Handbook, Pearson Education (Prentice Hall) Publishers, 8th or latest ed.. ISBN 0-13-189195-2.

Description: The eighth edition of *Strategies for Successful Writing: A Rhetoric*,

Research Guide, Reader, and Handbook is a comprehensive textbook that offers ample material for a full-year composition course. Instructors teaching a one-term course can make selections from Chapters 1-16, from whatever types of specialized writing suit the needs of their students, and from appropriate essays in the reader.

Because we strongly believe that an effective composition textbook should address the student directly, we have aimed for a style that is conversational yet clear and concise. We believe that our style invites students into the book, lessens their apprehensions about writing, and provides a model for their own prose. This style complements our strong student-based approach to writing, and together they help create a text that genuinely meets student needs.

1321 English Composition II – Mr. Kevin Sanders, Dr. Charlotte Simmonds-Hammons, Dr. Douglas Robillard, Dr. Emmanuel Egar – Used All Semesters

1321 English Composition II (WEB) – Staff (Instructor)

Reference:

Mauk, John; Metz, John. **Inventing Arguments**, Wadsworth/Cengage Learning Publishers. (Brief 2nd Edition).

Description: Inventing Arguments draws attention to the real material and intellectual affairs of student writers. It teaches students to build arguments from the rhetorical matter swirling around them, including but limited to the essays, articles, reports, and images they encounter in the classroom. As instructors ourselves, we've found that students need help getting beyond common argument topics and lifeless support strategies. To succeed in academic argument, and the critical thinking it requires, students must go beyond announcing common opinions and relying on basic factual support. They need help inventing unique positions, developing appeals, and coming to revelatory insights. To these ends, Inventing Arguments has three major pedagogical goals: 1) to foreground the *invention* of arguments (the discovery and development of increasingly complex claims and counterarguments). 2) To vitalize the argumentative process by focusing on *situations* rather than particular argumentative forms. 3) To help students enter arguments in a sophisticated fashion—by attending to the voices and tensions that are already lurking within and around a topic. When students tune in to the claims, values, and beliefs of others, their own arguments gain intensity and complexity.

2300 Introduction to Literature – Dr. Charlotte Simmonds-Hammons, Dr. Bettye Williams, Mr. Kevin Sanders, Dr. Emmanuel Egar (Instructors) Used All Semesters
2300 Introduction to Literature Web Course, Staff

Reference:

Roberts, Edgar V.; Jacobs, Henry E. **Literature: An Introduction to Reading and Writing**. Longman, Pearson Education (Prentice Hall). (9th edition). ISBN-13:978-0-13-604099-6.

Description: Adapted from the Back Cover (How important is writing in your course?) *When Edgar Roberts taught literature and composition, a large part of his courses involved essay-writing assignments. He dedicated a substantial amount of his class time to explaining how students should prepare their writing assignments. He discovered that the more he described to his students what he wanted, and the more time he spent explaining things, the better the final*

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essays turned out to be. There was a direct correlation between the way he made his assignments and the quality of student work he received. Professor Roberts started to hand out directions to his students, saving him valuable classroom and preparation time. Over the years, he tested each assignment in his own classes. To meet the needs of the literature and composition course, Professor Roberts seamlessly integrated writing-about-literature instruction with a comprehensive literature anthology. The result is the book you hold in your hands.

Literature: An Introduction to Reading and Writing is founded on the principles of writing about literature. It is not an afterthought and it is not treated as a separate chapter or appendix; but rather, it is the carefully integrated philosophy of Professor Roberts' approach to teaching literature and composition.

2310/2320 English Literature I – Dr. Douglas Robillard (Instructor)- Used Spring/Fall Semesters

Reference:

Greenblatt, Stephen., Norton Anthology of English Literature. W.W. Norton & Company, Inc. (8th edition).

Description: A legendary bestseller for more than forty years, this is the classic survey to the field from the Middle Ages to the twenty-first century. With 274 authors, the Eight Edition deepens its representation of essential works in all genres, ranging from Seamus Heaney's award-winning translation of *Beowulf*, Milton's *Paradise Lost*, and More's *Utopia* to the great poets and prose writers of the nineteenth century—Blake and Austen, Wordsworth and Byron, Tennyson and Barrett Browning—twentieth-century classics of a truly global English literature—Conrad's *Heart of Darkness*, Woolf's *A Room of One's Own*, Achebe's *Things Fall Apart*, and Friel's *Translations*, to name a few, Color Plates—over 75 in all—and thematic clusters of brief and historically significant texts bring to life the cultural concerns of each period. Concise glosses and annotations, period introductions, biographical head notes, timeliness, and selected bibliographies help readers understand and enjoy the rich diversity of English literature.

2360 World Literature I – Dr. Emmanuel Eggar – Used Fall Semester

References:

Lawall, Sarah. Norton Anthology of Western Literature. W.W. Norton & Company, Inc., volume I. (8th edition).

Description: Read by millions of students over seven editions, The Norton Anthology of Western Literature remains the most trusted undergraduate survey of Western literature available and one of the most successful college texts ever published. Firmly grounded by the hallmark strengths of all Norton anthologies—through and helpful introductory matter, judicious annotation, complete texts wherever possible—the Eighth Edition features a significantly expanded selection of literature (37 new authors and over 150 new pieces) as well as three new pedagogical features designed to enrich students' understanding of the historical and cultural context of the literary works.

Eggar, Emmanuel. *Black Women Poets of Harlem Renaissance*. University Press of America.

Description: Black Women Poets of Harlem Renaissance presents a critical examination of the creative poetic achievements of five women writers during the Harlem Renaissance.

Egar, Emmanuel. *Poetics of Rage*. University Press of America.

Description unavailable

Egar, Emmanuel. *Rhetorical Implications of Achebe's Things Fall Apart*. University Press of America.

Description: Egar (English, Paul Quinn College) relates the available scholarship on novelist Achebe's use of language to their rhetorical implications. He argues that Achebe's use of language is more than a tool for communication. Instead, it is a medium for the reenactment and simulation of the simplicity of life, the dreaminess, and the boredom.

2360 World Literature I WEB – Dr. Yolanda W. Page , Staff (Instructor)

Reference:

Lawall, Sarah. The Norton Anthology of World Literature, volumes A,B,C. W.W. Norton & Company. (2nd edition).

Description: The first edition of The Norton Anthology of World Literature to appear in the twenty-first century offers many new works from around the world and a fresh new format that responds to contemporary needs. The global reach of this anthology encompasses important works from Asia and Africa, central Asia and India, the Near East, Europe, and North and South America—all presented in the light of their own literary traditions, as shared heritage of generations of readers in many countries, and as a part of a network of cultural and literary relationships whose scope is still being discovered.

2361 World Literature II – Dr. Emmanuel Egar – Spring 2010/2011

Reference:

Lawall, Sarah. Norton Anthology of Western Literature. W.W. Norton & Company, Inc., Volume II (8th edition).

Description: Read by millions of students over seven editions, The Norton Anthology of Western Literature remains the most trusted undergraduate survey of Western literature available and one of the most successful college texts ever published. Firmly grounded by the hallmark strengths of all Norton anthologies—through and helpful introductory mater, judicious annotation, complete texts wherever possible—the Eighth Edition features a significantly expanded selection of literature (37 new authors and over 150 new pieces) as well as three new pedagogical features designed to enrich students' understanding of the historical and cultural context of the literary works.

(See extra readings under 2360 World Literature I.)

3301 College Grammar – Staff – Used All Semesters

References:

Watkins. Practical English Handbook. Houghton Mifflin Company. (11th edition).

Description: With concise explanations, abundant examples and models, ample practice opportunity, and help with all stages of the writing process, the *Practical English Handbook* has helped millions of students to write more effectively. A coding system breaks down topics and facilitates student use. The book's compact size allows it to fit comfortably in the hand, while the durable sewn binding will withstand constant use. The MLA and APA documentation guidelines thoroughly reflect the most recent changes.

Watkins. Practical English Workbook. Houghton Mifflin Company. (11th edition).

Description: The *Practical English Workbook* is a collection of supplemental sentence and paragraph exercises that follows the organization of the handbook.

3310 Advanced Composition – Used All Semesters

Reference:

Baker, Sheridan. Practical Stylist with Writings and Readings and Handbook. Longman Publishing. (8th edition).

Description: The Practical Stylist with Readings and Handbook has served for many years as a comprehensive guide to and model of solid, eloquent, and persuasive writing. This version of the text retains the finest features of the previous edition, while also including several exciting new readings from contemporary writers, expanded coverage of using electronic resources in research and writing, and an updated brief handbook of grammar, punctuation, and usage.

3320/3330 American Literature I/II- Dr. Bettye Williams (Instructor)-Spring/Fall 2010/2011 Semesters

References:

Perkins. American Tradition in Literature I/II (w/Ariel CD). McGraw-Hill Book Company, volumes 1/2 (11th edition).

Description: Widely known as the anthology that best meshes tradition with innovation, *The American Tradition in Literature* enters its fifth decade of leadership among textbook anthologies of American Literature. Literary merit remains the guiding principle of selection; flexibility of organization, with Walt Whitman represented in both volumes, continues to be one of the text's hallmarks.

Faulkner. *Go Down, Moses*. Random House, Inc.

Description: *Go Down*, is a cycle of seven interrelated episodes (including the much-anthologized story, "The Bear") examining the complex, changing relationships among the descendents of the McCaslin family in Faulkner's mythical Yoknapatawpha County, in northern

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Mississippi. The novel recounts the early days of Lucius Quintus Carothers McCaslin, and continues through the lives of his many descendants, both black and white, in a noteworthy exploration of race and miscegenation, and of the impact on the rural population of the South's vanishing wilderness.

3333 Adolescent Literature- Dr. Douglas Robillard (Instructor) Spring 2010/2011

Description: Literature for Today's Young Adults, Donelson, Allyn & Bacon, 7th edition – "Literature for Today's Young Adults Gets Better and Better"...With new features and thoroughly updated, the number one book in Young Adult Literature continues to help teachers learn how to motivate teenagers to become life-long readers. Written with the belief that students will have a better chance of becoming life-long readers if they have choices in what they read and if they enjoy it, renowned authors Alleen Nilsen and Ken Donelson offer a comprehensive, reader-friendly introduction to young adult literature framed within a rich literary, historical, and social context.

3370 Creative Writing – Spring 2010/2011

Anthology for Creative Writing, Anstading, Pearson Education (Prentice Hall) – An Anthology for Creative Writers: A Garden of Forking Paths is a multi-genre literary anthology with extensive selections of contemporary poetry, short fiction, creative non-fiction, alternative forms, and essays about writing and the creative process.

3391 Chaucer – Fall/Spring 2010/2011

The Riverside Chaucer, Benson, Pratt, & Robinson, Houghton Mifflin Company.
Description: The present edition is complete and newly edited texts of everything Chaucer wrote – *The Canterbury Tales*, *The Book of the Duchess*, *The House of Fame*, *Anelida and Arcite*, *The Parliament of Fowls*, *Boece*, *Troilus and Criseyde*, *The Legend of Good Women*, *The Short Poems*, *A Treatise on the Astrolabe*, *The Romaunt of the Rose*. Brief Language glosses are given at the foot of each page, while fuller notes are found at the end of the book

4301 History of English Language – Spring 2010/2011

History of English Language, Baugh, Pearson Education (Prentice Hall), 5th edition
Companion to Baugh and Cable History of English Language, Cable, Pearson Education (Prentice Hall), 3rd edition – Comprehensive and balanced, this classic exploration of the history of the English language combines internal linguistic history and external cultural history—from the Middle Ages to the present. Emphasis is on the political, social and cultural forces that affect language. Reflects the latest trends and statistics of the last ten years in a revised and updated chapter 1, English Present and Future.

4302 Modern English Grammar – Dr. Paul Lorenz (Instructor) Fall 2010/2011

Reference:

Finegan, Edward. Language: Its Structure and Use. 5th edition.
Thomson/Wadsworth, 2008 ISBN 1428205330 (paper)

Description: Language: Its Structure and Use explains core concepts in an interactive style that you can understand no matter what your major. With features like "What Do You Think?" and "Try It Yourself," you'll understand what you are experiencing on campus and in the

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classroom from a linguistic perspective. The expanded study sections and the available workbook provide you with the tools you will need for effective test prep.

4361 Contemporary British Literature – Dr. Paul Lorenz (Instructor) Spring 2010/2011

Reference:

The Norton Anthology of English Literature Vol. F: The Twentieth Century and After.
Norton, 1995 ISBN: 0393927229 (paper).

Never Let Me Go. Kazuo Ishiguro Vintage, 2006. ISBN: 1400078776 (paper).

On Chesil Beach by Ian McEwan. Anchor, 2008. ISBN:0307386171 (paper).

A Chinese-English Dictionary for Lovers by Xiaolu Guo. Anchor, 2008. ISBN: 0307278409 (paper).

5312 Advanced Survey of American Literature I - (Dr. Bettye Williams) Fall 2010/2011

Reference:

Lauter, Paul. The Heath Anthology of American Literature. Houghton Mifflin (4th edition) vol. I.

Description: This premier survey of American literature has influenced the manner in which the American literary canon is taught in classrooms across the nation. In response to readers' requests, the editors of the Heath Anthology continue to develop and reinforce its greatest strengths: diverse reading selections and strong ancillaries. With the assistance of more than 200 contributing editors, the editors have updated biographical and critical information and added new works of interest to both instructors and students. The Fourth Edition features writers and selections that highlight the divergent. ..

5313 Advanced Survey of American Literature Since Civil War II – Dr. Bettye Williams (Instructor) Spring 2010/2011

5314 Advanced/Survey/English Lit – Dr. Paul Lorenz (Instructor) Fall 2010/2011

5315 Advanced/Survey/English/Since 1700 – Dr. Paul Lorenz

Reference:

Norton Anthology of English Literature, Vol. 1. 8th edition. Norton, 1995. ISBN: 0393927229 (Hard cover).

2301 Humanities – Mrs. Margaret Mary Lynch, Mrs. Perveen Shahjahan (Instructors)
2301 Humanities (WEB) – Dr. Joanna Edwards/Adjunct Professor

Reference:

Witt. Humanities, Houghton-Mifflin Company, 7th edition, vol. 1. (Fall/Spring/Summer 2010/2011)

Description: This introductory text presents an overview of the liberal arts—literature, art, music, philosophy, and history—with a particular emphasis on literature. The unique selection of works from each culture provides students with global understanding of the humanities.

Several pedagogical features of the Seventh Edition, such as chapter objectives, key terms, art images, and summary questions, help students understand the major concepts of the text. Each volume begins with a “Chronicle of Events” that provides a timetable of key events in world history. “Continuities” sections focus on the lasting contributions of each society. Non-Western coverage includes a section on Japan in Volume I; Western material has been scaled back to provide balanced coverage.

2330 New Testament History – Dr. Joanna Edwards/Adjunct Professor – Spring 2010/2011

2331 Old Testament History – Dr. Joanna Edwards /Adjunct Professor – Fall 2010/2011

2340 Effective Thinking/Logic- Dr. Paul Lorenz (Instructor) –Fall/Spring Semesters

Reference:

Howard-Snyder and Wasserman. Power of Logic. McGraw-Hill Book Company, 2009 .
4th edition. ISBN: 780073407371 (Hard cover).

Description: This introductory level text carries the conviction that logic is the most important course that college students take. "The Power of Logic" provides balanced coverage of informal logic, traditional categorical logic, and modern symbolic logic, while its companion online supplement, "Logic Tutor," offers a wealth of applications for the concepts discussed.

2311 / 2321 Elementary Spanish I/II & 3311/3321 Intermediate Spanish I/II- Ms. Reevelyn Jones, Dr. Antony Hobbs (Instructors)

Reference:

Zayas-Bazan. ARRIBA, Zayas-Bazan, Pearson Education (Prentice Hall), 5th edition. (Fall/Summer)

Description: Wake up to the new, 5th edition of ¡Arriba! With each new edition, more and more instructors discover that ¡Arriba! offers a solid, proven approach to reaching communicative objectives. Through its flexible approach-one that allows instructors to adapt it to their own teaching styles and goals-¡Arriba! ensures success for both students and instructors. Built on a balance of solid grammar and communication skills, the eclectic, balanced approach of ¡Arriba! enables students to receive the broad foundation that they need to succeed in Intermediate courses and beyond. Culture frames and infuses every chapter giving students a doorway into the cultures of the Spanish speaking world and bringing fun and excitement into your classroom. Rich in pedagogy and supported by carefully integrated supplementary materials, this complete and versatile program is the result of years of development and class testing. Now, more than ever, ¡Arriba! brings the Spanish-speaking world to your students and gives them the tools and motivation to thrive in your classroom and the world at large Wake up to the new, 5th edition of ¡Arriba! With each new edition, more and more instructors discover that ¡Arriba! offers a solid, proven approach to reaching communicative objectives. Through its flexible approach-one that allows instructors to adapt it to their own teaching styles and goals-¡Arriba! ensures success for

both students and instructors. Built on a balance of solid grammar and communication skills, the eclectic, balanced approach of ¡Arriba! enables students to receive the broad foundation that they need to succeed in Intermediate courses and beyond. Culture frames and infuses every chapter giving students a doorway into the cultures of the Spanish speaking world and bringing fun and excitement into your classroom. Rich in pedagogy and supported by carefully integrated supplementary materials, this complete and versatile program is the result of years of development and class testing. Now, more than ever, ¡Arriba! brings the Spanish-speaking world to your students and gives them the tools and motivation to thrive in your classroom and the world at large.

Department of Mathematical Sciences & Industrial Technology

TECH 1301 Industrial Safety Management O. C. Duffy (Instructor)

Reference:

National Safety Council. Supervisor Safety Manual. (9th ed.).

Course Description: Designed to emphasize the importance of safety in an industrial community. Industrial Safety Program Design and Management. Safety issues and directives are covered.

TECH 1302 Engineering Graphics Dr. G. Godfrey (Instructor)

Reference:

Giesecke, Mitchell, Spencer, Hill, Dygdon, Novak and Loving. Engineering Graphics (8th ed.). Prentice Hall Publishers.

Course Description: A basic course in the use of engineering graphics as a communication tool; drafting equipment familiarization; conventional representations; orthographic projections; sketching; detailed drawing, lettering, dimensioning and spatial geometry.

TECH 1320 Materials, Construction Procedures & Practices O. C. Duffy (Instructor)

Reference:

Madan, Armpriest, Scarborough. Building Construction: Principles, Materials, and Systems. Pearson Educ – Prentice Hall Publishers.

Course Description: Study of the materials and their installation practices used in structures. Includes piles, footings and foundations, steel, wood, floor, roof, and wall support systems. Soil and asphalt structures in various construction sites, mixing of materials, and proper handling are introduced.

TECH 1332 Fundamental Electronics Dr. C. R. Colen (Instructor)

Reference:

Floyd. Electronics Fundamentals w / CD. (8th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: A broad overview of electronics and an introduction to the hardware and instruments used in the electronics industry. Provides a coverage of the fundamentals of

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electricity and magnetism. Emphasis is on DC circuits. Course also includes a study of the generation of alternating current and voltage, AC measuring instruments, treatment of various combinations of resistance, inductance and capacitance in AC circuits, power, resonance and transformers. Prerequisite: MATH 1330 or 1350.

TECH 1360 Introduction to Manufacturing F. Webb (Instructor)

Reference:

Kalpakjian. Manufacturing Engineering & Technology. (5th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: An introductory study of manufacturing processes. Included are manufacturing materials, chip removal, material fusion, shaping, molding etc., and educational tours to local manufacturing industries. Prerequisite: MATH 1330.

TECH 2308 Strength of Materials O. C. Duffy (Instructor)

Reference:

Morrow (2007). Statics & Strength of Materials. (6th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: Application of the principles of statics and dynamics to problems including force analysis, centroids and moments of inertia, behavior of materials subject to tension, compression, shear and bendings, and interpretation of related test data. Prerequisite: MATH 1330, 1340, and 2510.

TECH 2321 Codes/Specifications/Law O. C. Duffy (Instructor)

Reference:

Mancomm (2004). O.S.H.A (1910): CFR 29 (SKU #B1910) (P). AST Publishers.

Course Description: Complete coverage of one nationally recognized code system, plus cross referencing with the others. Introduction to legal problems in construction through the study of court cases related to the field. Use of specification books to study both codes and legal matters. Prerequisite: MATH 1320.

TECH 2333 Electronic Devices Dr. S. Taghavi (Instructor)

Reference:

Floyd. Electronic Devices Electron Flow Version w / CD. (8th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: A coverage of semi-conductor devices with emphasis on the flow and control of current at the P-N junction. Devices to be studied include diodes, transistors (BJT, UJT, and FET), and pnpn switches. Introduction to Integrated Circuit Technology.
Prerequisite: TECH 1332.

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TECH 2335 Circuit Analysis I Dr. S. Taghavi (Instructor)

Reference:

Floyd (2007). Principles of Electric Circuits: Conv Current w / CD. (8th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: Basic circuit concepts, definitions and analysis of resistive circuits with DC sources. Coverage of circuit theorems and the methods used in the analysis of circuits with two or more voltage or current sources. Prerequisite: TECH 1331.

TECH 2363 Flex Manufacturing F. Webb (Instructor)

Reference:

Nanfara. CNC Workshop: Version 2.0 w / CD. ('02 ed.). SDC Publications. AND Fuller. Robotics. (2nd ed.). Pearson Educ – Prentice Hall Publishers. [BOTH texts required.]

Course Description: This course will introduce students to fundamentals of robotics, cnc, automation and their applications in manufacturing systems, especially when considering flexibility in making products in productive and efficient ways. The course deals with introductory programming concepts and principles of robotics and CNC machines.

Prerequisite: TECH 1360, TECH 2367, MATH 1330/1350, and 1340/1351.

TECH 2367 Manufacturing Process Assembly Dr. G. Godfrey (Instructor)

Reference:

Kalpakjian & Schmid. Manufacturing Engineering and Technology. (5th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: This course covers the characteristics of manufacturing materials and their adaptability to various joining processes, including lectures on welding technology and laboratory practices. Prerequisites: TECH 1302, 1360, MATH 1330/1350, 1340/1351.

TECH 3310 Prin / Ergo / Motion-Time Study F. Webb (Instructor)

Reference:

Niebel (2003). Methods, Standards & Work Design. (11th ed.). McGraw - Hill Publishers.

Course Description: A study of scientific and engineering design applications in the work environment. Use of the six ergonomic design criteria will be stressed. A student research project involving analysis and evaluation of a person work interface situation using the ergonomic design criteria is required.

TECH 3363 Plt. Layout / Mtl. Handling O. C. Duffy (Instructor)

Reference:

Meyers (2005). Manufacturing Facilities Design & Material Handling. (3rd ed.). Pearson Educ – Prentice Hall Publishers.

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Course Description: The fundamental theories, practices, and method for design of manufacturing facilities; covers material handling equipment and services. Prerequisites: TECH 2361, 2362, 2367.

TECH 4307 Quality Control Dr. C. R. Colen (Instructor)

Reference:

Besterfield. Quality Control w / CD. (7th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: The problems associated with improving design, specifications and control of product quality. Utilization of appropriate software. Prerequisites: MATH 2370.

TECH 4338 Microprocessors and Applications Dr. S. Taghavi (Instructor)

Reference:

Gadnkar. Microprocessor: Architecture, Programming and Applications w / 8085. Pearson Educ – Prentice Hall Publishers.

Course Description: Logical organization of single-chip microprocessors, their interfacing and applications in industrial control and instrumentation. Coverage of the assembly language used in programming microprocessors. Lecture: 2 hours per week. Laboratory: 2 hours per week. Prerequisites: TECH 3337.

TECH 4341 Computer Hardware Dr. S. Taghavi (Instructor)

Reference:

Floyd. Digital Fundamentals w / 2 CDs. (9th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: Coverage of digital system design methods used in the analysis and design processor units, control units, input and output interfaces, and memory organization. Study of the internal operations of microcomputers. Prerequisites: TECH 3337.

TECH 4366 Automation / Production / System F. Webb (Instructor)

Reference:

Groover. Automation, Production Systems. (3rd ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: This is an upper level course in production, automation and related systems. It is designed to cover the fundamental concepts associated with automation and production in contemporary industries as well as the analytical techniques and controls necessary for decision-making in production systems.

TECH 4370 Computer Aided Manufacturing F. Webb (Instructor)

Reference:

Cozzens (2002). Mastercam Workbook (Version 9). SCHR Publishers.

Course Description: Computer-Aided Manufacturing [CAM] is a concept which encompasses any use of the computer to enhance or aid in any manufacturing process. The two best known users of the computer to aid in manufacturing are Computer Numerical Control (CNC) and Robotics. Prerequisites: TECH 3368, 3369.

Department of Mathematical Sciences and Technology
Fall 2010

CPSC 2151/ 2251 Computer Organization/Assembly Programming (Staff)

Reference:

Irvine, Kip R. Assembly Language for Intel-Based Computers. (5th ed). Prentice Hall Publishing

Course Description: Programming methodology, showing how to use assembly language to create both system-level software tools and application programs and computer hardware manipulation

CPSC 2300 Computer Science I (CSI) (formerly CPSC 2341 - C-Language) Z. Howard (Instructor)

Reference:

Deitel & Deitel, C++ How to Program, (7th ed.) Prentice Hall Publishing Company

Course Description: This course teaches students the introductory, concepts of the field of Computer Science, as well as presents them with the elementary programming concepts and abstractions. The course places emphasis on teaching students how interact with a modern computer systems as well as develop the programs which operate it using a structured and object-oriented approach, software reuse, and component-oriented software construction.

CPCS 2322 SPECIAL TOPICS / VISUAL BASIC J. Anthony (Instructor)

Reference:

Shelly, Gary B., Cashman, Thomas J., Quasney, Jeffrey J. Visual Basic.NET. Thompson / Course Technology Publishers.

Course Description: A course covering the fundamentals of the Windows GUI (Graphical User Interface) operating system and Visual Basic as a Windows-based application development language. This course will use practical problems to illustrate application-building techniques (using a current version of Visual Basic) as well as take advantage of new capabilities of building applications in a graphical environment, such as building one's own special-purpose, professional-looking applications

CPSC 2341 (now CPSC 2300 Computer Science I) Computer Programming / C-Language Z. Howard (Instructor)

Reference:

Deitel. C++: How to Program. (7th ed.). Prentice Hall Publishing Company.

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Course Description: A complete introduction to program design and problem-solving using the programming language “C”.

CPSC 2344 Local Area Networking Dr. J. Walker (Instructor)

Reference:

Forouzan, Behrouz A. Data Communications and Networking (4thed.). McGraw-Hill Publishers.

Course Description: This course is developed to provide an understanding of communication and sharing of data and other resources among networked computers. By networking, information is made available to anyone, at any time and any place. Basic elements of data communications, data transformations, and topics of fundamental importance concerning the technology and architectures of networks are included.

CPSC 2350 Computer Programming / COBOL J. Anthony (Instructor)

Reference:

Stern. COBOL for the 21st Century (11th ed.). John Wiley and Sons, Publishing

Course Description: An introduction to structural COBOL programming.

CPSC 2363 Introduction to Business Programming (staff)

Reference:

Gaskin. Go Office 07: Intro w/Trans. Gde. MyLab, GOW (P) (2008) Prentice Hall Publishers.

Course Description: An introduction to the use of microcomputers. Surveys the use of a microcomputer operating system interface, use of the Internet and several applications programs, including a spreadsheet program, a word processing program, a database program, and a presentation program. Lecture, “hands-on” exercises, and corporate profiles are used to make students aware of realistic applications of such program

CPSC 3271/3172 Introduction to Numerical Solutions Z. Howard (Instructor)

Reference:

Chapra. Applied Numerical Methods W/MATLAB. (2nd ed.) McGraw-Hill Publishers.

Course Description: Numerical algorithms, including elementary discussion or error.

CPSC 3300 (formerly 2315 File Processing) J. Anthony (Instructor)

Reference:

Roger S. Pressman. Software Engineering: A Practitioner’s Approach. (7th ed.)
McGraw-Hill Publishing Co.

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Course Description: An introduction to the concept and techniques of structuring data on bulk storage devices. Topics include sequential processing, sort / merge algorithm, data structures, and random access data presentations, file organizations, and an introduction to the data base structures.

CPSC 3345 Artificial Intelligence Dr. J. Walker (Instructor)

Reference:

Michael Negnevitsky, Artificial Intelligence: A Guide to Intelligent Systems, (2nd ed.). Addison-Wesley Publishers.

Course Description: This course introduces students to basic concepts and methods of artificial intelligence from a computer science perspective. Emphasis of the course will be on the selection of data representations and algorithms useful in the design and implementation of intelligent systems. Areas of application such as knowledge representation, natural language processing, expert systems, and robotics will be explored.

CPSC 3346 Bioinformatics Z. Howard & Dr. A. Buckner (Instructors)

Reference:

Dan E. Krane & Michael L. Raymer, Fundamental Concepts of Bioinformatics

Course Description: This course introduces students to the basic concepts and methods that have wide applicability in the natural sciences. Particular emphasis will be placed the arena of Bioinformatics, and the selection of data representation, algorithms useful in the design and implementation of practical problems arising from the field such as genetic sequencing, prediction and molecular structure comparison. Course content will be motivated by practical problems, which arise within the interdisciplinary fields of bioinformatics and computer science.

CPSC 3352 Algorithmic Language and Compilers Z Howard (Instructor)

Reference:

Sebesta. Concepts of Programming Languages. (9th ed.) Addison-Wesley Publishers.

Course Description: The course provides the central concepts in most widely used programming languages and their implementation on conventional computers. The main goal of this course is to bring together the facets of language design and implementation within a single conceptual.

CPSC 3362 Special Topics / JAVA Dr. J. Walker (Instructor)

Reference:

Johnson. Intro to JAVA Programming, Etc. (2007). Course Technology Publishing.

Course Description: Introduction to the fundamentals of object-oriented programming using JAVA. Covers the design of applications and applets as well as the object-oriented concepts of classes, methods, inheritance and polymorphism.

CPSC 4221 Special Topics / Computer Science Seminar Dr. J. Walker (Instructor)

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Reference:

No assigned textbook, however reference material may be provided.

Course Description: This course is designed to enhance student's knowledge of research and applications development in Computer Science.

Department of Mathematical Sciences
Fall 2010

MATH 1310 Elementary Algebra (Staff)

Reference:

Aufman, Barker, Lockwood (2007). Algebra: Introductory and Intermediate. (4th ed.)
Houghton-Mifflin Publishers

Course Description: This course is designed for students who have not had a previous course in Algebra. It will cover some fundamental topics (exponents, properties of real numbers, order of operations, order relationships), along with basic skills; then move on to concentrate on algebraic topics. Basic skills refer to being able to accurately add, subtract, multiply and divide real numbers, including fractions, decimals, and percentages. The topics covered include solving linear equations and inequalities with applications, and extending basic skill operations to polynomials and expressions with exponents.

MATH 1320 Intermediate Algebra (Staff)

Reference:

Aufman, Barker, Lockwood (2007). Algebra: Introductory and Intermediate. (4th ed.)
Houghton-Mifflin Publishers

Course Description: This course is designed for students who have not had a previous course in Algebra. It will cover some Fundamental operations of the real number system, factoring, linear equations, functions and graphs, exponents, and radicals. Prerequisite: A minimum grade of "C" or higher in MATH 1310 or placement by score on Math Placement Test. Credit hours not counted toward graduation requirement.

MATH 1330 College Algebra (Staff)

Reference: Blitzer. College Algebra w/ 2 CDs. (5th ed.) Pearson Educ. – Prentice Hall

Course Description: The number system and fundamental operations, linear and quadratic equations, functions and graphs, complex numbers, inequalities, logarithms and matrices.

Prerequisite: A minimum grade of "C" or higher in MATH 1320 or placement by score on ACT of 19 or higher. ***A scientific calculator is required for this course (the graphic calculator TI, TI-83 or TI-85 is recommended by the department).***

MATH 1340 College Trigonometry (Staff)

Reference:

Larson. Trigonometry. (7th ed.). Houghton-Mifflin Publishers.

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Course Description: Trigonometric functions, fundamental identities, variations and graphs of trigonometric functions, functions of composite angles, polar coordinates, logarithms, solutions of right and oblique triangles, progressions and the binomial theorem. Prerequisites: MATH 1330 or ACT score of 23 or higher

MATH 1550 Pre-Calculus (Staff)

Reference:

Sullivan. Pre-Calculus: Enhanced ETC. (5th ed.). Pearson Educ – Prentice Hall

Course Description: Designed to prepare students to enter Calculus. Coverage includes trigonometry and analytical geometry. Trigonometric functions and their graphs, inverse functions, law of sine and cosine, polar coordinates, vectors and their applications. Algebra, coordinate geometry, functions, graphs, systems of equations, etc. Prerequisite: A minimum grade of “C” or higher in MATH 1320 or placement by score on ACT of 19 or higher.

MATH 2370 Introduction To Elementary Statistics (Staff)

Reference:

Blumen. Elementary Statistics. (7th ed.). McGraw-Hill Publishers.

Course Description: The classification of data, different kinds of averages and their uses, frequency distributions, meaning of dispersion and its measurement, regression or trend lines, the meaning of co-relations. Class usually held in Cain-Gilliland – CPSC Lab. This course will not be counted toward a major in mathematics. Prerequisite: MATH 1330 **AND** MATH 1550.

MATH 2510 Calculus I (Staff)

Reference:

Larson Edwards. Calculus. (9th ed.). Brooks-Cole Publishers.

Course Description: Variables, functions, limits, differentiations and integration of algebraic forms, integration as a process of summation; applications to geometry and mechanics. 5-hour course. Prerequisite: MATH 1350 or ACT score of 27 or higher. Required of majors.

MATH 2520 Calculus II S. Abedi (Instructor)

Reference:

Smith & Minton. Calculus. (3rd ed.). McGraw-Hill Publishers.

Course Description: Differentiation and integration of transcendental functions, polar coordinates, parametric equations, indeterminate forms, integration, series, expansion of functions, partial derivatives and multiple integrals. 5-hour course. Prerequisite: A minimum grade of C or better in MATH 2510. Required of majors.

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MATH 3311 Linear Algebra (Staff)

Reference:

Fraleigh, John B., Beauregard, Raymon A. Linear Algebra. (3rd ed.). Addison-Wesley Publishers

Course Description: The following mathematical concepts will be discussed in detailed: Matrices, vector spaces, subspaces, basis and dimensions, ranks, linear transformations, determinants, and linear systems. This course is designed for majors in mathematics, computer science, engineering, or the sciences. This course bridges the calculus with the more theoretical upper division courses in many disciplines. Prerequisites: Grade C or better in MATH 2510.

MATH 3320 Probability & Statistics (staff)

Reference:

Montgomery. Applied Statistics & Probability for Engineers. (4th ed.). John Wiley & Sons Publishers

Course Description: Probability spaces, random variables, univariate and multi-variate distributions, moment generating functions, laws of large numbers and central limit theorem.

Prerequisite: MATH 2520; MATH 3331, recommended..

MATH 3331 Multivariable Calculus S. Abedi (Instructor)

Reference:

Smith & Minton. Calculus. (3rd ed.). McGraw-Hill Publishers.

Course Description: A critical treatment of certain topics in calculus: limits, continuity, differentiation of functions of one and several variables, series, definite and multiple integrals.

Prerequisite: A minimum grade of C or better in MATH 2520.

MATH 3390 Discrete Math S. Abedi (Instructor)

Reference:

Rosen, Kenneth H. Discrete Mathematics and its Applications. (6th ed.). Addison-Wesley Publishers.

Course Description: Topics include Logic, Mathematical Induction, Sets, Relations, Algorithms, Permutations and Combinations, Proof Strategy and Graphs. Through this course, students can develop their mathematical maturity, that is, their ability to understand and create mathematical arguments. This course provides the mathematical foundations for many computer science courses, including Data Structure, Algorithms, and formal languages. This course also is the gateway to more advanced courses in all parts of the mathematical sciences. Prerequisite: A minimum grade of C or better in MATH 2520.

MATH 4300 Modern Algebra I (Staff)

Reference:

Gilbert. Elements of Modern Algebra. (6th ed.) Thompson Learning Publishers.

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Textbook RE: Implementation of Act 175 of 2007
Spring 2010 – Fall 2011

Course Description: The following mathematical concepts will be discussed in detail: Sets, mappings, binary operations, permutations and inverses, matrices, relations, mathematical induction, congruence classes, and groups. As time permits rings, integral domains, and fields will be introduced. This course is designed for majors in mathematics, math education, or the sciences. This course bridges the gap from manipulative to theoretical mathematics and helps prepare secondary mathematics teachers for their careers. Prerequisite: MATH 3311 **OR** MATH 3390.

MATH 4320 Differential Equations I S. Abedi (Instructor)

Reference:

Zill, Dennis G. A 1st Course in Differential Equations. (5th ed.). Thompson Learning Publishers

Course Description: Treatment of ordinary differential equations, including principle types of first and second order equations, simultaneous equations, and linear equations with constant coefficients. Applications to geometry, physics, chemistry and mechanic. Prerequisite: A minimum grade of C or higher in MATH 2520.

MATH 4340 Modern Elementary Math I Dr. F. Hartfield (Instructor)

Reference:

Miller, Charles D., Heeren, Vern E. Hornsby by John E. Hornsby, Jr. Mathematical Ideas. (11th ed.). Addison-Wesley Educational Publishers (Harper Collins College Publishers).

Course Description: A course in mathematics for prospective and in-service teachers of elementary mathematics. Stressing the art of problem solving, basic set theory, introduction to logic, numeration and mathematical systems. Prerequisite: A minimum grade of C or higher in MATH 1330.

Department of Industrial Technology
Spring 2010

TECH 1301 Industrial Safety Management O. C. Duffy (Instructor)

Reference:

National Safety Council. Supervisor Safety Manual. (9th ed.).

Course Description: Designed to emphasize the importance of safety in an industrial community. Industrial Safety Program Design and Management. Safety issues and directives are covered.

TECH 1302 Engineering Graphics Dr. G. Godfrey (Instructor)

Reference:

Giesecke, Mitchell, Spencer, Hill, Dygdon, Novak and Loving. Engineering Graphics (8th ed.). Prentice Hall Publishers.

University of Arkansas at Pine Bluff
Textbook RE: Implementation of Act 175 of 2007
Spring 2010 – Fall 2011

Course Description: A basic course in the use of engineering graphics as a communication tool; drafting equipment familiarization; conventional representations; orthographic projections; sketching; detailed drawing, lettering, dimensioning and spatial geometry.

TECH 1320 Materials, Construction Procedures & Practices O. C. Duffy (Instructor)

Reference:

Mehta. Building Construction. 2008. Pearson Educ – Prentice Hall Publishers.

Course Description: Study of the materials and their installation practices used in structures. Includes piles, footings and foundations, steel, wood, floor, roof, and wall support systems. Soil and asphalt structures in various construction sites, mixing of materials, and proper handling are introduced.

TECH 1332 Fundamental Electronics Dr. C. R. Colen (Instructor)

Reference:

Floyd. Electronics Fundamentals w / CD. (8th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: A broad overview of electronics and an introduction to the hardware and instruments used in the electronics industry. Provides a coverage of the fundamentals of electricity and magnetism. Emphasis is on DC circuits. Course also includes a study of the generation of alternating current and voltage, AC measuring instruments, treatment of various combinations of resistance, inductance and capacitance in AC circuits, power, resonance and transformers. Prerequisite: MATH 1330 or 1550.

TECH 1360 Introduction to Manufacturing F. Webb (Instructor)

Reference:

Kalpakjian. Manufacturing Engineering & Technology. (6th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: An introductory study of manufacturing processes. Included are manufacturing materials, chip removal, material fusion, shaping, molding etc., and educational tours to local manufacturing industries. Prerequisite: MATH 1330.

TECH 2308 Strength of Materials O. C. Duffy (Instructor)

Reference:

Morrow (2007). Statics & Strength of Materials. (7th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: Application of the principles of statics and dynamics to problems including force analysis, centroids and moments of inertia, behavior of materials subject to tension, compression, shear and bendings, and interpretation of related test data. Prerequisite: MATH 1330, 1340, and 2510.

TECH 2321 Codes/Specifications/Law O. C. Duffy (Instructor)

Reference:

Mancomm (2007). O.S.H.A (1910): CFR 29 (SKU #B1910) (P). (3rd ed.) AST Publishers.

Course Description: Complete coverage of one nationally recognized code system, plus cross referencing with the others. Introduction to legal problems in construction through the study of court cases related to the field. Use of specification books to study both codes and legal matters. Prerequisite: MATH 1320.

TECH 2333 Electronic Devices Dr. S. Taghavi (Instructor)

Reference:

Floyd. Electronic Devices Electron Flow Version w / CD. (8th ed.). Pearson Educ – Prentice Hall Publishers.

Berube. Computer SIM EXP/Electronic Devices Etc w/CD. (3rd ed.) Pearson Educ – Prentice Hall Publishers [*recommended*].

Course Description: A coverage of semi-conductor devices with emphasis on the flow and control of current at the P-N junction. Devices to be studied include diodes, transistors (BJT, UJT, and FET), and pnpn switches. Introduction to Integrated Circuit Technology.

Prerequisite: TECH 1332.

TECH 2335 Circuit Analysis I Dr. S. Taghavi (Instructor)

Reference:

Floyd (2010). Principles of Electric Circuits: Conv Current w / CD. (9th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: Basic circuit concepts, definitions and analysis of resistive circuits with DC sources. Coverage of circuit theorems and the methods used in the analysis of circuits with two or more voltage or current sources. Prerequisite: TECH 1331.

TECH 2363 Flex Manufacturing F. Webb (Instructor)

Reference:

Smid. CNC Programming Handbook w / CD. ('08 3rd ed.). SDC Publications.

Course Description: This course will introduce students to fundamentals of robotics, CNC, automation and their applications in manufacturing systems, especially when considering flexibility in making products in productive and efficient ways. The course deals with introductory programming concepts and principles of robotics and CNC machines.

Prerequisite: TECH 1360, TECH 2367, MATH 1330, and 1340/1550.

TECH 2367 Manufacturing Process Assembly Dr. G. Godfrey (Instructor)

Reference:

Kalpajian & Schmid. Manufacturing Engineering and Technology. (6th ed.). Pearson Educ – Prentice Hall Publishers.

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Course Description: This course covers the characteristics of manufacturing materials and their adaptability to various joining processes, including lectures on welding technology and laboratory practices. Prerequisites: TECH 1302, 1360, MATH 1330, 1340/1550.

TECH 3302 Advanced Design (Staff)

Reference:

Course Description: Advanced design systems incorporating 2D and 3D design and productivity tools for use in manufacturing settings. Topics include: Geometric Tolerancing, 3D models, planar and coordinate systems, solid modeling, feature based design, assemblies, ProEngineer or AutoCAD software.

TECH 3310 Prin / Ergo / Motion-Time Study F. Webb (Instructor)

Reference:

Niebel (2009). Methods, Standards & Work Design. (12th ed.). McGraw - Hill Publishers.

Course Description: A study of scientific and engineering design applications in the work environment. Use of the six ergonomic design criteria will be stressed. A student research project involving analysis and evaluation of a person work interface situation using the ergonomic design criteria is required.

TECH 3363 Plt. Layout / Mtl. Handling O. C. Duffy (Instructor)

Reference:

Meyers (2009). Manufacturing Facilities Design & Material Handling. (4th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: The fundamental theories, practices, and method for design of manufacturing facilities; covers material handling equipment and services. Prerequisites: TECH 2361, 2362, 2367.

TECH 4307 Quality Control Dr. C. R. Colen (Instructor)

Reference:

Besterfield. Quality Control w / CD. (8th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: The problems associated with improving design, specifications and control of product quality. Utilization of appropriate software. Prerequisites: MATH 2370.

TECH 4338 Microprocessors and Applications Dr. S. Taghavi (Instructor)

Reference:

Gadnkar. Microprocessor: Architecture, Programming and Applications w / CD (5th ed.). Pearson Educ – Prentice Hall Publishers.

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Course Description: Logical organization of single-chip microprocessors, their interfacing and applications in industrial control and instrumentation. Coverage of the assembly language used in programming microprocessors. Lecture: 2 hours per week. Laboratory: 2 hours per week. Prerequisites: TECH 3337.

TECH 4341 Computer Hardware Dr. S. Taghavi (Instructor)

Reference:

Floyd. Digital Fundamentals w / 2 CDs. (10th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: Coverage of digital system design methods used in the analysis and design processor units, control units, input and output interfaces, and memory organization. Study of the internal operations of microcomputers. Prerequisites: TECH 3337.

TECH 4366 Automation / Production / System F. Webb (Instructor)

Reference:

Groover. Automation, Production Systems. (3rd ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: This is an upper level course in production, automation and related systems. It is designed to cover the fundamental concepts associated with automation and production in contemporary industries as well as the analytical techniques and controls necessary for decision-making in production systems.

TECH 4370 Computer Aided Manufacturing F. Webb (Instructor)

Reference:

Manton. Mastercam X Training Guide Mill 2D. WIDPB. AND
Valentino, Goldenberg. Learning Mastercam. Industrial Press

Course Description: Computer-Aided Manufacturing [CAM] is a concept which encompasses any use of the computer to enhance or aid in any manufacturing process. The two best known users of the computer to aid in manufacturing are Computer Numerical Control (CNC) and Robotics. Prerequisites: TECH 3368, 3369.

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CPSC 2300 Computer Science I (CSI) (formerly CPSC 2341) Z. Howard (Instructor)

Reference:

Deitel & Deitel, C++ How to Program, (7th ed.) Prentice Hall Publishing Company

Course Description: This course teaches students the introductory, concepts of the field of Computer Science, as well as presents them with the elementary programming concepts and abstractions. The course places emphasis on teaching students how interact with a modern

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computer systems as well as develop the programs which operate it using a structured and object-oriented approach, software reuse, and component-oriented software construction.

CPSC 2301 Computer Science II (CSII) (formerly CPSC 3341) Z. Howard (Instructor)

Reference:

Deitel. C++ How To Program. (7th ed.). Prentice-Hall, Inc.

Course Description: This course is a continuation of CPSC 2341. It is designed to prepare students for advanced application development in C language in addition to apply various data structures and file design using C language.

CPCS 2322 SPECIAL TOPIC / VISUAL BASIC J. Anthony (Instructor)

Reference:

Shelly, Gary B., Cashman, Thomas J., Quasney, Jeffrey J. Visual Basic.NET. Thompson / Course Technology Publishers.

Course Description: A course covering the fundamentals of the Windows GUI (Graphical User Interface) operating system and Visual Basic as a Windows-based application development language. This course will use practical problems to illustrate application-building techniques (using a current version of Visual Basic) as well as take advantage of new capabilities of building applications in a graphical environment, such as building one's own special-purpose, professional-looking applications

CPSC 2344 Local Area Networking Dr. J. Walker (Instructor)

Reference:

Forouzan, Behrouz A. Data Communications and Networking (4th ed.). McGraw Hill Publishers

Course Description: This course is developed to provide an understanding of communication and sharing of data and other resources among networked computers. By networking, information is made available to anyone, at any time and any place. Basic elements of data communications, data transformations, and topics of fundamental importance concerning the technology and architectures of networks are included.

CPSC 2350 Computer Programming / Cobol J. Anthony (Instructor)

Reference:

Stern. COBOL for the 21st Century (11th ed.). Wiley and Sons Publishing.

Course Description: An introduction to structural COBOL programming.

CPSC 2363 Introduction to Business Programming (staff)

Reference: Gaskin. Go Office 07: Intro w/Trans. Gde. MyLab, GOW (P) (2008) Prentice Hall Publishers.

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Course Description: An introduction to the use of microcomputers. Surveys the use of a microcomputer operating system interface, use of the Internet and several applications programs, including a spreadsheet program, a word processing program, a database program, and a presentation program. Lecture, "hands-on" exercises, and corporate profiles are used to make students aware of realistic applications of such program.

CPSC 3102 / 3201 Data Structures Z. Howard (Instructor)

Reference:

Gilberg/Frouzan PWS. Data Structure A. Pseudocode Approach with C. (2nd ed.) Prentice Hall Publishing.

Course Description: Study of various data structures such as stack, list, trees, integration, and recursion. The use of data structures for searching, sorting, and information retrieval. Discussion of internal and external sorting

CPSC 3271 / 3172 Introduction to Numerical Solutions Z. Howard (Instructor)

Reference:

Chapra. Applied Numerical Methods W/MATLAB. (2nd ed.) McGraw-Hill Publishers.

Course Description: Numerical algorithms, including elementary discussion or error.

CPSC 3341 (now CPSC 2301 - Computer Science II) Advance Programming 1
Z. Howard (Instructor)

Reference:

Deitel. C++ How To Program. (7th ed.). Prentice-Hall, Inc.

Course Description: This course is a continuation of CPSC 2341. It is designed to prepare students for advanced application development in C language in addition to apply various data structures and file design using C language.

CPSC 3345 Artificial Intelligence Dr. J. Walker (Instructor)

Reference:

Michael Negnevitsky, Artificial Intelligence: A Guide to Intelligent Systems, (2nd ed.), Addison-Wesley

Course Description: This course introduces students to basic concepts and methods of artificial intelligence from a computer science perspective. Emphasis of the course will be on the selection of data representations and algorithms useful in the design and implementation of intelligent systems. Areas of application such as knowledge representation, natural language processing, expert systems, and robotics will be explored.

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CPSC 3362 Special Topics / JAVA (Staff)

Reference:

Johnson. Intro to JAVA Programming, Etc. (2007). Course Technology Publishing.

Course Description: Introduction to the fundamentals of object-oriented programming using JAVA. Covers the design of applications and applets as well as the object-oriented concepts of classes, methods, inheritance and polymorphism.

CPSC 4221 Special Topics / Computer Science Seminar Dr. J. Walker (Instructor)

Reference:

No assigned textbook, however reference material may be provided.

Course Description: This course is designed to enhance student's knowledge of research and applications development in Computer Science.

CPSC 4252 / 4153 Computer System Programming Dr. J. Walker (Instructor)

Reference:

Irvine. Assembly Language for Intel-Based Computer (5th ed.). Pearson Education Prentice Hall.

Course Description: Advanced Assembly language programming. Topics include arrays, macros, disk fundamentals, BIOA-Level programming and high-level language interferes.

CPSC 4301 Computer Organ and Switch Theory Z. Howard (Instructor)

Reference:

Mano. Logic & Computer Design Fundamentals (4th ed.). Pearson Education - Prentice Hall. Publishers.

Course Description: Introduction to Digital Logic Design and digital circuits, analysis and design of combinational circuits, binary numbering system and Boolean Algebra.

CPSC 4389 Special Topics / Operating Systems Dr. J. Walker (Instructor)

Reference:

Stallings, William. Operating Systems: Internals and Design Principles (6th ed.). Prentice Hall

Course Description: Historical development of operating systems to control complex computing systems; process management, memory management, scheduling, input/output and file management, concurrency, security. Networking and Distributed processing operating systems in practice.

CPSC 4394 Special Topics / Database Management Systems J. Anthony (Instructor)

Reference: Kroenke, David M. Co. Database Processing: Fundamentals, Design & Implementation (11th ed.). Prentice Hall Publisher

Course Description: Database Management Systems involves a study of the fundamental concepts of the design, structure, and development of databases. It includes an in-depth look at the relational database model (including SQL – Structured Query Language); coverage also includes an introduction to hierarchical and CODASYL models and the Microsoft ACCESS application software package.

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MATH 1310 Elementary Algebra (Staff)

Reference:

Aufman, Barker, Lockwood (2007). Algebra: Introductory and Intermediate. (4th ed.)
Houghton-Mifflin Publishers

Course Description: This course is designed for students who have not had a previous course in Algebra. It will cover some fundamental topics (exponents, properties of real numbers, order of operations, order relationships), along with basic skills; then move on to concentrate on algebraic topics. Basic skills refer to being able to accurately add, subtract, multiply and divide real numbers, including fractions, decimals, and percentages. The topics covered include solving linear equations and inequalities with applications, and extending basic skill operations to polynomials and expressions with exponents.

MATH 1320 Intermediate Algebra (Staff)

Reference:

Aufman, Barker, Lockwood (2007). Algebra: Introductory and Intermediate. (4th ed.)
Houghton-Mifflin Publishers

Course Description: This course is designed for students who have not had a previous course in Algebra. It will cover some Fundamental operations of the real number system, factoring, linear equations, functions and graphs, exponents, and radicals. Prerequisite: A minimum grade of “C” or higher in MATH 1310 or placement by score on Math Placement Test. Credit hours not counted toward graduation requirement. .

MATH 1330 College Algebra (Staff)

Reference: Blitzer. College Algebra w/ 2 CDs. (5th ed.) Pearson Educ. – Prentice Hall

Course Description: The number system and fundamental operations, linear and quadratic equations, functions and graphs, complex numbers, inequalities, logarithms and matrices. Prerequisite: A minimum grade of “C” or higher in MATH 1320 or placement by score on ACT of 19 or higher. ***A scientific calculator is required for this course (the graphic calculator TI, TI-83 or TI-85 is recommended by the department).***

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MATH 1340 College Trigonometry Dr. F. Hartfield / Dr. C. Grantz (Instructors)

Reference:

Larson. Trigonometry. (7th ed.). Houghton-Mifflin Publishers.

Course Description: Trigonometric functions, fundamental identities, variations and graphs of trigonometric functions, functions of composite angles, polar coordinates, logarithms, solutions of right and oblique triangles, progressions and the binomial theorem. Prerequisites: A minimum grade of “C” or higher in MATH 1330 or placement by score on ACT of 23 or higher.

MATH 1550 Pre-Calculus (Staff)

Reference:

Sullivan. Pre-Calculus: Enhanced ETC. (5th ed.). Pearson Educ – Prentice Hall

Course Description: Algebra, coordinate geometry, functions, graphs, systems of equations, etc. Prerequisite: A minimum grade of “C” or higher in MATH 1320 or placement by score on ACT of 19 or higher.

MATH 2370 Introduction To Elementary Statistics (Staff)

Reference:

Blumen. Elementary Statistics. (7th ed.). McGraw-Hill Publishers.

Course Description: The classification of data, different kinds of averages and their uses, frequency distributions, meaning of dispersion and its measurement, regression or trend lines, the meaning of co-relations. Class usually held in Cain-Gilliland – CPSC Lab. This course will not be counted toward a major in mathematics. Prerequisite: MATH 1330 **AND** MATH 1550.

MATH 2510 Calculus I (Staff)

Reference:

Larson Edwards. Calculus. (9th ed.). Brooks-Cole Publishers.

Course Description: Variables, functions, limits, differentiations and integration of algebraic forms, integration as a process of summation; applications to geometry and mechanics. 5-hour course. Prerequisite: MATH 1350 or ACT score of 27 or higher. Required of majors.

MATH 2520 Calculus II S. Abedi (Instructors)

Reference:

Larson Edwards. Calculus. (9th ed.). Brooks-Cole Publishers.

Course Description: Differentiation and integration of transcendental functions, polar coordinates, parametric equations, indeterminate forms, integration, series, expansion of functions, partial derivatives and multiple integrals. 5-hour course. Prerequisite: A minimum grade of C or better in MATH 2510. Required of majors.

**MATH 3300 Selected Topics / Secondary Math / Teachers Dr. F. Hartfield
(Instructor)**

Reference:

Hecht. Optics. (4th ed.) Addison-Wesley Publishers

Course Description: This course is designed for students who plan to teach mathematics in secondary schools. The course emphasizes selected topics in mathematics, including general applications to algebra, geometry, trigonometry, probability and statistics, and calculus using graphing calculators, manipulative, and computer technology in the classroom. Prerequisite: MATH 2510 -or- consent of instructor.

MATH 3311 Linear Algebra (Staff)

Reference:

Fraleigh, John B., Bearegard, Raymon A. Linear Algebra. (3rd ed.). Addison-Wesley Publishers

Course Description: The following mathematical concepts will be discussed in detailed: Matrices, vector spaces, subspaces, basis and dimensions, ranks, linear transformations, determinants, and linear systems. This course is designed for majors in mathematics, computer science, engineering, or the sciences. This course bridges the calculus with the more theoretical upper division courses in many disciplines. Prerequisites: Grade C or better in MATH 2510.

MATH 3320 Probability & Statistics (Staff)

Reference:

Montgomery. Applied Statistics & Probability for Engineers. (4th ed.) John Wiley & Sons Publishers.

Course Description: Probability spaces, random variables, univariate and multi-variate distributions, moment generating functions, laws of large numbers and central limit theorem.

Prerequisite: MATH 2520; MATH 3331, recommended..

MATH 3331 Multivariable Calculus S. Abedi (Instructor)

Reference:

Smith & Minton. Calculus. (3rd ed.). McGraw-Hill Publishers.

Course Description: A critical treatment of certain topics in calculus: limits, continuity, differentiation of functions of one and several variables, series, definite and multiple integrals.

Prerequisite: A minimum grade of C or better in MATH 2520.

MATH 3350 College Geometry (Staff)

Reference: Lial, Steffensen and Johnson (1990). Essentials of Geometry. (2nd ed.) Harper Collins (for College Students).

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Course Description: Problems of construction, logic, indirect methods, similar and homothelic figures, the triangle, median, bisectors, altitudes and transversals. Theorems and problems in solid geometry. Required of majors in Mathematics Education. Prerequisites: A minimum grade of C or better MATH 1330 **OR** MATH 1550.

MATH 3390 Discrete Math S. Abedi (Instructor)

Reference:

Rosen, Kenneth H. Discrete Mathematics and its Applications. (6th ed.). Addison-Wesley Publishers.

Course Description: Topics include Logic, Mathematical Induction, Sets, Relations, Algorithms, Permutations and Combinations, Proof Strategy and Graphs. Through this course, students can develop their mathematical maturity, that is, their ability to understand and create mathematical arguments. This course provides the mathematical foundations for many computer science courses, including Data Structure, Algorithms, and formal languages. This course also is the gateway to more advanced courses in all parts of the mathematical sciences. Prerequisite: A minimum grade of C or better in MATH 2520.

MATH 4220 Mathematics Seminar Dr. F. Hartfield (Instructor)

Reference:

No Textbook.

Course Description: A seminar for majors. Discussion of problems, solutions, theorems and topics not generally nor deeply covered in the regular curriculum, including history and philosophy of mathematics, number theory, topology, induction, non-Euclidean geometries. Conducted by members of the staff and invited participants. Prerequisite: Any 3000-level math course.

MATH 4310 Modern Algebra II (Staff)

Reference:

Gilbert. Elements of Modern Algebra. (6th ed.) Thompson Learning Publishers.

Course Description: A continuation of MATH 4300 Modern Algebra I: mathematical concepts discussed in detail: Sets, mappings, binary operations, permutations and inverses, matrices, relations, mathematical induction, congruence classes, and groups. As time permits rings, integral domains, and fields will be introduced. This course is designed for majors in mathematics, math education, or the sciences. This course bridges the gap from manipulative to theoretical mathematics and helps prepare secondary mathematics teachers for their careers. Prerequisite: MATH 4300.

MATH 4321 Differential Equations II S. Abedi (Instructor)

Reference:

Zill, Dennis G. A 1st Course in Differential Equations. (5th ed.). Thompson Learning Publishers

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Course Description: A continuation of MATH 4340 Modern Elementary Mathematics I: Treatment of ordinary differential equations, including principle types of first and second order equations, simultaneous equations, and linear equations with constant coefficients. Applications to geometry, physics, chemistry and mechanic. Prerequisite: A grade of C or better in MATH 4320 **AND** at least concurrent enrollment in MATH 3331.

MATH 4341 Modern Elementary Math II Dr. F. Hartfield (Instructor)

Reference:

Miller, Charles D., Heeren, Vern E. Hornsby by John E. Hornsby, Jr. Mathematical Ideas. (11th ed.). Addison-Wesley Educational Publishers (Harper Collins College Publishers).
Course Description: A continuation of MATH 4340 MODERN ELEMENTARY MATHEMATICS I. Emphasizing number theory, real numbers and their representations, and basic concepts of algebra and geometry. Prerequisites: A minimum grade of C or higher in MATH 1330 **OR** independent of MATH 4340.

MATH 4399 History Of Mathematics Dr. F. Hartfield (Instructor)

Reference:

Burton. History of Mathematics: Introductory (6th ed.). McGraw-Hill Publishers.

Course Description: A survey of the development of Pythagorean Mathematics, the Euclidean Algorithm, the Non-Euclidean Geometry and the Physical Space in the 20th century.
Prerequisite: Consent of instructor.

Department of Industrial Technology
Spring 2010

TECH 1301 Industrial Safety Management O. C. Duffy (Instructor)

Reference:

National Safety Council. Supervisor Safety Manual. (9th ed.).

Course Description: Designed to emphasize the importance of safety in an industrial community. Industrial Safety Program Design and Management. Safety issues and directives are covered.

TECH 1302 Engineering Graphics Dr. G. Godfrey (Instructor)

Reference:

Giesecke, Mitchell, Spencer, Hill, Dygdon, Novak and Loving. Engineering Graphics (8th ed.). Prentice Hall Publishers.

Course Description: A basic course in the use of engineering graphics as a communication tool; drafting equipment familiarization; conventional representations; orthographic projections; sketching; detailed drawing, lettering, dimensioning and spatial geometry.

TECH 1320 Materials, Construction Procedures & Practices O. C. Duffy (Instructor)

Reference:

Mehta. Building Construction. 2008. Pearson Educ – Prentice Hall Publishers.

Course Description: Study of the materials and their installation practices used in structures. Includes piles, footings and foundations, steel, wood, floor, roof, and wall support systems. Soil and asphalt structures in various construction sites, mixing of materials, and proper handling are introduced.

TECH 1332 Fundamental Electronics Dr. C. R. Colen (Instructor)

Reference:

Floyd. Electronics Fundamentals w / CD. (8th ed.). Pearson Educ – Prentice Hall.

Course Description: A broad overview of electronics and an introduction to the hardware and instruments used in the electronics industry. Provides a coverage of the fundamentals of electricity and magnetism. Emphasis is on DC circuits. Course also includes a study of the generation of alternating current and voltage, AC measuring instruments, treatment of various combinations of resistance, inductance and capacitance in AC circuits, power, resonance and transformers. Prerequisite: MATH 1330 or 1550.

TECH 1360 Introduction to Manufacturing F. Webb (Instructor)

Reference:

Kalpajian. Manufacturing Engineering & Technology. (6th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: An introductory study of manufacturing processes. Included are manufacturing materials, chip removal, material fusion, shaping, molding etc., and educational tours to local manufacturing industries. Prerequisite: MATH 1330.

TECH 2303 Architectural Drafting G. Godfrey (Instructor)

Reference:

Kicklighter. (2008). Architecture. Goodhart / Wilcox Publishers.

Course Description:

TECH 2315 Site Planning and Layout O. C. Duffy (Instructor)

Reference:

Brooks. Site Planning ("88" ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: Study and use of range and direction, coordinates, elevations, record systems, boundary surveys, leveling, property descriptions, traverses, metes and bounds, and topographical surveys. Prerequisites: MATH 1330 and 1340/1550.

TECH 2321 Codes/Specifications/Law O. C. Duffy (Instructor)

Reference:

Mancomm (2007). O.S.H.A (1910): CFR 29 (SKU #B1910) (P). (3rd ed.) AST Publishers.

Course Description: Complete coverage of one nationally recognized code system, plus cross referencing with the others. Introduction to legal problems in construction through the study of court cases related to the field. Use of specification books to study both codes and legal matters. Prerequisite: MATH 1320.

TECH 2322 Heavy Equipment Materials Handling (Staff)

Reference:

Course Description: Heavy Equipment is an intermediate level Construction Management course devoted to educating the future construction manager about the different types of large construction equipment, their selection, operation, and management. A majority of class time is devoted to mathematical calculations related to the operation and use of heavy construction equipment. Prerequisites: TECH 1320, MATH 1340/1550.

TECH 2334 Electronic Analysis and Design S. Taghavi (Instructor)

Reference:

Course Description: A second course in electronic devices with emphasis on the mathematical modeling of electronic devices and the techniques used in the analysis and design of electronic circuits. Study of small and large signal amplifier models, the hybrid-pi model, frequency response and multi-stage circuits. Prerequisites: TECH 1332, 2333.

TECH 2363 Flex Manufacturing F. Webb (Instructor)

Reference:

Nanfara. CNC Workshop: Version 2.0 w / CD. ('02 ed.). SDC Publications. AND
Smid. CNC Programming Handbook w / CD. ('08 3rd ed.). SDC Publications.

Course Description: This course will introduce students to fundamentals of robotics, cnc, automation and their applications in manufacturing systems, especially when considering flexibility in making products in productive and efficient ways. The course deals with introductory programming concepts and principles of robotics and CNC machines.

Prerequisite: TECH 1360, TECH 2367, MATH 1330, and 1340/1550.

TECH 2367 Manufacturing Process Assembly Dr. G. Godfrey (Instructor)

Reference:

Kalpakjian & Schmid. Manufacturing Engineering and Technology. (6th ed.). Pearson Educ – Prentice Hall Publishers.

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Course Description: This course covers the characteristics of manufacturing materials and their adaptability to various joining processes, including lectures on welding technology and laboratory practices. Prerequisites: TECH 1302, 1360, MATH 1330, 1340/1550.

TECH 3306 Inventory Management F. Webb (Instructor)

Reference:

Arnold. Introduction to Materials Management. (6th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: Deals primarily with inventory classifications, inventory control, optimum inventory with appropriate software package and future trends in inventory management with appropriate software package.

TECH 3337 Digital Electronics Dr. S. Taghavi (Instructors)

Reference:

Buchla. Experiments in Digital Fundamentals. (10th ed.). Pearson Educ – Prentice Hall Publishers. AND

Floyd. Digital Fundamentals w / 2 CDs. (10th ed.). Pearson Educ – Prentice Hall Publishers. [BOTH texts required.]

Course Description: A study of digital logic design techniques, including Boolean Algebra and truth tables, used in the design of combinational circuits; state transition techniques for the analysis and design of sequential logic circuits. An introduction to the principles of digital computer organization. Course includes lab.

TECH 3338 Circuit Analysis II Dr. S. Taghavi (Instructors)

Reference:

Floyd. Principles of Electric Circuits: Conventional Current Version w / CD. (8th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: Provides a coverage of time-varying waveforms, reactive components and the analysis of resistive reactive circuits with time-varying sources. Study of the mathematical techniques of complex numbers used in the analysis of reactive circuits; Fourier analysis of signals. Prerequisites: TECH 1332, 2335.

TECH 3339 Computer Service and Repair Dr. S. Taghavi (Instructor)

Reference:

Antonakos, J.L. Microcomputer Repair w / 2 CDs. (4th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: This course emphasizes the study of computer components, computer construction and repair. The emphasis of this course will be on basic work safety, computer fundamental, disassembling and reassembling a typical personal computer identifying the major

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computer components, preventive maintenance procedure, troubleshooting techniques, and upgrading software and hardware. Lecture 2 hours per week. Laboratory 2 hours per week.

TECH 3365 Manufacturing Processes and Planning (Staff)

Reference:

Course Description: The principles and concepts that are essential when considering material flows, management problems, decision making techniques, and supporting data base on the manufacturing industry. Prerequisites: 9 hours of manufacturing courses.

TECH 4307 Quality Control Dr. C. R. Colen (Instructor)

Reference:

Besterfield. Quality Control w / CD. (8th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: The problems associated with improving design, specifications and control of product quality. Utilization of appropriate software. Prerequisites: MATH 2370.

TECH 4320 Estimating and Scheduling O. C. Duffy (Instructor)

Reference:

Ghattas. Practical Project Management. (2001) Pearson Educ – Prentice Hall Publishers.

Course Description: Experience in quantity survey, materials take off, pricing (using CSI numbers), and estimating computerized systems. Scheduling is done using bar charts, gant diagrams, and CPM (with and without computerized systems). Prerequisites: At least 15 credit hours of courses.

TECH 4338 Microprocessors and Applications Dr. S. Taghavi (Instructor)

Reference:

Gadnkar. Microprocessor: Architecture, Programming and Applications w / CD (5th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: Logical organization of single-chip microprocessors, their interfacing and applications in industrial control and instrumentation. Coverage of the assembly language used in programming microprocessors. Lecture: 2 hours per week. Laboratory: 2 hours per week. Prerequisites: TECH 3337.

TECH 4341 Computer Hardware Dr. S. Taghavi (Instructor)

Reference:

Floyd. Digital Fundamentals w / 2 CDs. (10th ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: Coverage of digital system design methods used in the analysis and design processor units, control units, input and output interfaces, and memory organization. Study of the internal operations of microcomputers. Prerequisites: TECH 3337.

TECH 4366 Automation / Production / System F. Webb (Instructor)

Reference:

Groover. Automation, Production Systems. (3rd ed.). Pearson Educ – Prentice Hall Publishers.

Course Description: This is an upper level course in production, automation and related systems. It is designed to cover the fundamental concepts associated with automation and production in contemporary industries as well as the analytical techniques and controls necessary for decision-making in production systems.

TECH 4370 Computer Aided Manufacturing F. Webb (Instructor)

Reference:

Manton. Mastercam X Training Guide Mill 2D. WIDPB. AND
Valentino, Goldenberg. Learning Mastercam. Industrial Press

Course Description: Computer-Aided Manufacturing [CAM] is a concept which encompasses any use of the computer to enhance or aid in any manufacturing process. The two best known users of the computer to aid in manufacturing are Computer Numerical Control (CNC) and Robotics. Prerequisites: TECH 3368, 3369.

TECH 4372 Hydraulics and Pneumatics O. C. Duffy (Instructor)

Reference:

Esposito. Fluid Power w/ Applications. (7th ed.). Pearson Educ – Prentice Hall Publishers.

Special Instructions: Junior / Senior Industrial Technology Major

**Department of Music
Textbooks for Spring, Summer & Fall 2010**

Music – Piano Class I 1160

Textbook: Lancaster, & Renfrow. **Alfred's Group Piano for Adults, Book 1** (2nd Edition).

Course Description. A course in practical keyboard facility, sight-reading, elementary improvisation and keyboard harmony. For music majors who do not meet minimum piano proficiency. This course is also open to any student regardless of major.

Music – Piano Class II – 1161

Textbook: Lancaster & Renfrow. **Alfred's Group Piano for Adults, Book 2** (2nd Edition)

Course Description: A continuation of content and materials in Music 1160, but at the intermediate level. Emphasis on more advanced piano performance techniques, literature, improvisation and advanced keyboard harmony.

Music – Piano Class Intermediate 1162

University of Arkansas at Pine Bluff
Textbook RE: Implementation of Act 175 of 2007
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Textbook: Bastien, Jane Smisor, Lisa and Lori. *Piano for Adults, Book 2*. San Diego: Kjos Music Press, 1999.

Course Description: A continuation of keyboard and musical skills introduced in Music 1161, striving for greater proficiency in keyboard technique, sight reading, improvisation, repertoire and keyboard harmony.

Music - Piano Class 1163

Textbook: Bastien, Jane Smisor, Lisa and Lori. *Piano for Adults, Book 2*. San Diego,. Kjos Music Press, 1999.

Course Description: An advanced course in piano stressing continued development of the skills from the previous levels. There is a greater emphasis on repertoire. Course can be used as preparation for applied piano study.

Music – Voice Class 1231

Textbook: Stanton, Royal. *Steps for Singing for Voice Classes*. 3rd Ed. Prospect Heights, IL: Waveland Press, Inc., 2000.

Course Description: Designed especially for music students who do not study voice privately. An introductory course in vocal habits, tone production, breathing, phrasing, diction and vocal literature.

Music - Prep Theory 1305

Textbook: *Alfred's Essentials of Music Theory* Surmani, Andrew, Karen. Farnum, and Orton Manus; Alfred Publishing Company.

Course Description: Introductory course for students who do not pass Theory Placement Test. Study of clefs, scales, key signatures , time signatures, basic intervals and triads.

Music – Theory II 1207:

Textbook: *Elementary HarmonyTheory and Practice* by Robert W. Ottman

Course Description: This course is a continuation of Theory I. Harmonic progression, types of melodies and cadences, and four-part writing are studied.

Music - Sight Singing & Ear-Training II 1206

Textbook: Robert Ottman. *Music for Sight-Singing* Prentice Hall Publishers. Prentice Hall, New Jersey. 2006

Course Description: Harmonic dictation is introduced in aural skills.

Music Theory IV 3224

Textbook: *Advanced Harmony by Robert Ottman*

Course Description: Present advanced harmonic and melodic practices of the Baroque and Classical periods, including use of non-traditional four part chords such as the augmented sixth family, secondary dominant and secondary leading tone chords, and borrowed chords.

University of Arkansas at Pine Bluff
Textbook RE: Implementation of Act 175 of 2007
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Music – Sight-Singing IV 3124

Textbook: Ottman, Robert. *Music for Sight-Singing*. Prentice Hall Publishers. Prentice Hall, New Jersey. 2006

Course Description: This course will continue the strides begun in the previous semester.

Music – Theory VI 3340

Textbook: *Counterpoint*, 4th Ed., by Kent Kennan, Prentice Hall Publishers, 1999.

Course Description: Counterpoint. Study of 18th century contrapuntal practices and procedures. Exercises in two-voice counterpoint. Study of diatonic, fugal and chorale forms.

Music - Instrumental Methods I (Strings) 2126

Textbook: Kotman, Robert. *Teaching Strings*. New York: Schirmer, 1996.

Course Description: Class instruction in string instruments with emphasis on teaching principles, methodologies, materials, technologies, and curriculum development for string classes in elementary and secondary schools. Lab experiences in teaching beginning string students in individual and group settings will be an integral part of instruction.

Music – Instrumental Methods (Woodwinds) 2127

Textbook: Dietz, William. *Teaching Woodwinds*. New York: Schirmer, 1998.

Course Description: Class instruction in woodwind instruments with emphasis on teaching principles, methodologies, material, technologies, and curriculum development for woodwind classes in elementary and secondary schools. Lab experiences in teaching beginning wind students in individual and group settings will be an integral part of instruction.

Music – Diction 2315

Textbook: Adams, David. *A Handbook for Singers*. New York Oxford University Press, 1998.

Course Description: Introductory diction class for music majors. Study of topics to include pronunciation rules of Italian, German, and French utilizing the International Phonetic Alphabet. Prerequisite: Student must be a music major, applied voice.

Music – Orchestration I 3221

Textbook: Orchestration and Arranging: *The Technique of Orchestration* (5th Ed.) by Kent Kennan, Donald Grantham. Prentice-Hall Publishers. Prentice Hall, New Jersey. 2002.

Course Description: This course emphasizes the practical study of the qualities and varied capabilities of all orchestral and band instruments. Basic principles of instrumental scoring and transposition.

Music – Music History 3321

Textbook: Burkholder, J. Peter, Donald Grout, and Claude V. Palisca. *A History of Western Music*. 7th ed. New York: Norton & Company 2006.

University of Arkansas at Pine Bluff
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Spring 2010 – Fall 2011

Burkholder, J. Peter and Claude Palisca, eds. ***Norton Anthology of Western Music***. Vol. 1: Ancient Baroque, 5th ed. New York: W.W. Norton & Co., 2006.

Burkholder, J. Peter and Claude Palisca. ***Norton Anthology of Western Music***. Vol. 1: Ancient to Baroque, 5th ed., New York: W.W. Norton & Company, 20-06

Course Description: A study of the history of music from antiquity to the present time with emphasis on the evolution and growth of major developments in music, on the historical contexts from which these developments come and on significant composers, performers and theorists. Music literature from all stylistic periods will be studied through listening and score analysis. These classes should be taken in the junior year.

Music – Public School Music 2350

Textbook: Winslow, Dallins & Kierst *Music Skills for Classroom Teachers*, 9th Ed. William Brown Publishers

Course Description: For elementary education majors. Fundamentals of music, elementary ear training. And rhythmic skills, playing classroom instruments, performance of simple melodies on the piano, study of appropriate song literature and music terminology for grades K-6.

Music – Band Techniques 4222

Textbook: Walker, Darwin E. ***Teaching Music: Managing the Successful Music Program***. 2nd Ed., Schirmer/Thomson Learning Publishers, 1989 & 1998

Course Description: For instrumental majors. A study of the program and purpose of the marching band in public schools. Emphasis placed on types of formation, selection of music, writing and arranging of music scores.

Music – General Music Methods, Elementary, Middle and Secondary Grades 3310

Textbook: Campbell, Patricia and Carol Scott-Kasner. ***Music in Childhood: From Preschool through the Elementary Grades***. Old Tappan, New Jersey: Schirmer Books/Simon & Schuster, 2005.

Course Description: The study of children's growth through singing, listening, creativity, rhythmic movement, instrumental and reading. Opportunity to explore techniques of Orff, Kodaly, Dalcroze, Suzuki and others. Also, the study of materials and methods employed in elementary, junior, middle and secondary schools. Special emphasis on the general music class K-12

Music History/ Literature

Music –Music History and Appreciation 2330

Textbook: ***Music An Appreciation by Roger Kamien***. 5th Ed. New York: McGraw Hill Higher Education, 2006.

University of Arkansas at Pine Bluff
Textbook RE: Implementation of Act 175 of 2007
Spring 2010 – Fall 2011

Course Description: Designed for non-music majors who elect to study music as a cultural experience. A survey and listening course of music literature from several periods and genres.

MUSI – Digital Audio Recording Techniques 4301

Textbook: Huber, Miles: *Modern Recording Techniques*. Focal Press. 6th Ed. 2005.
Pohlmann, Ken C. *Principles of Digital Audio*. McGraw-Hill/TAB Electronics. 5th Ed. 2005.

Utz, Peter. *Introduction to Audio*. A-R Editions. Middleton, WS. 2003

Kefauver, Alan P. *The Audio Recording Handbook*. A-R Editions. Middleton, WS. 2001.

Music – Introduction to Recording Studio Techniques 2301

Textbook: Huber, Miles. *Modern Recording Techniques*. Focal Press. 6th Ed., 2005

Course Description: A survey of the fundamental techniques of the audio studio recording process, including signal flow, microphones, multi-track recording, audio mixing, signal processing analog and digital recording, DAT and CD-R recording media as well as live and multi-take recording. Course taught in lecture/lab format with outside assignments involving both library research and hands-on studio lab work.

Textbook Required Spring 2010

Music -Theory I 1206:

Textbook: *Elementary Harmony* by Robert Ottman, Elementary Harmony Workbook by Robert Ottman. 5th Ed. Prentice-Hall Publishers. Prentice Hall, New Jersey. 1998

Course Description: A study of scales, intervals, chords through the ninths. Drills in all diatonic and chromatic scales and intervals.

Music – Sight Singing & Ear Training 1106:

Textbook: *Music for Sight Singing* by Robert Ottman,. 7th Ed.; Prentice Hall Publishers,. Prentice Hall, New Jersey 2006

Course Description: Introductory ear-training and melodic and rhythmic dictation are studied.

Music – Orchestration and Arranging 4310

Textbook *Orchestration and Arranging: The Technique of Orchestration*. 6th Ed. by Kent Kennan, Donald Grantham. Prentice Hall, New Jersey. 2002

Music – Orchestration and Arranging 4310

Course Description: The course emphasizes the practical study of the qualities varied capabilities of all orchestral and band instruments. This course teaches the skills of scoring music for band, orchestra, and smaller ensembles. Principles of instrumental scoring and transposition will be taught.

Music - Theory III 2210

Textbook: *Advanced Harmony (Theory and Practice)* by Robert Ottman

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Course Description: Further develops study of principles of harmonic structures used by composers of the 17th & 18th centuries. Short arranging projects will be assigned and analysis of four-part chorales will be explored further at this level.

Music: Sight-Singing & Ear-Training III 2110

Textbook: Ottman, Robert. *Music for Sight Singing*. Prentice Hall Publishers, Prentice Hall, New Jersey. 2006

Course Description: This course will emphasize harmonic and melodic studies out of the minor modes. Rhythmic studies will involve compound time signatures. Sight-singing melodies explore more clefs.

Music: Theory V 3330

Textbook: *Musical Form and Analysis*. McGraw-Hill Publishers, 1995.

Course Description: The study of music literature from the Baroque period to the 20th century through harmonic and structural analysis and listening. The study will include simple song forms, cadential formulas, diatonic and chromatic chords, non-chord tones, analysis of phrase and period structures and their combinations, binary and ternary forms and compositional techniques. Twentieth century forms compositional processes and literature will also be studied.

Music – Public School Music 2350

Textbook: Winslow, Dallins & Kierst Music Skills for Classroom Teachers, 9th Ed. William Brown Publishers

Course Description: For elementary education majors. Fundamentals of music, elementary ear training. And rhythmic skills, playing classroom instruments, performance of simple melodies on the piano, study of appropriate song literature and music terminology for grades K-6.

Music – Band Techniques 4222

Textbook: Walker, Darwin E. *Teaching Music: Managing the Successful Music Program*. 2nd Ed., Schirmer/Thomson Learning Publishers, 1989 & 1998

Course Description: For instrumental majors. A study of the program and purpose of the marching band in public schools. Emphasis placed on types of formation, selection of music, writing and arranging of music scores.

Music – General Music Methods, Elementary, Middle and Secondary Grades 3310

Textbook: Campbell, Patricia and Carol Scott-Kasner. *Music in Childhood: From Preschool through the Elementary Grades*. Old Tappan, New Jersey: Schirmer Books/Simon & Schuster, 2005.

Course Description: The study of children's growth through singing, listening, creativity, rhythmic movement, instrumental and reading. Opportunity to explore techniques of Orff, Kodaly, Dalcroze, Suzuki and others. Also, the study of materials and methods employed in

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elementary, junior, middle and secondary schools. Special emphasis on the general music class K-12

Music –Music History and Appreciation 2330

Textbook: *Music An Appreciation by Roger Kamien*. 5th Ed. New York: McGraw Hill Higher Education, 2006.

Course Description: Designed for non-music majors who elect to study music as a cultural experience. A survey and listening course of music literature from several periods and genres.

Music – Brasswind Methods 2124

Textbook: Whitener, Scott. *A Complete Guide to Teaching Brass Instruments and Techniques*. 2nd Ed. Schirmer Publications, 1997.

Course Description: Methods, practices, and materials of brass-wind pedagogy are taught to the prospective teacher. In addition, the rudiment of playing brasswind instruments are emphasized. This is a required course for all music education majors **and is for music majors only**.

Music – Percussion Methods 2125

Textbook: Cook, Gary D., *Teaching Percussion*. 3rd Ed., Thomson/Schirmer Publishers 2006.

Course Description: This course is designed to prepare the student to teaching beginning percussion at the elementary and middle school levels.

Music – Music History 3323

Textbook: Burkholder, J. Peter, Donald Grout, and Claude V. Palisca. *A History of Western Music*. 7th ed. New York: Norton & Company 2006.

Burkholder, J. Peter and Claude Palisca, eds. *Norton Anthology of Western Music*. Vol. 1: Ancient Baroque, 5th ed. New York: W.W. Norton & Co., 2006.

Burkholder, J. Peter and Claude Palisca. *Norton Anthology of Western Music*. Vol. 1: Ancient to Baroque, 5th ed., New York: W.W. Norton & Company, 20-06

Course Description: A study of the history of music from antiquity to the present time with emphasis on the evolution and growth of major developments in music, on the historical contexts from which these developments come and on significant composers, performers and theorists. Music literature from all stylistic periods will be studied through listening and score analysis. These classes should be taken in the junior year.

Conducting Courses:

Music – Conducting I 2220.

Textbook:

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Course Description: A study of the elements important to the development of competent and effective conductors. The students will study: traits of good conductor and good conducting, fundamental conducting techniques (proper preparation, beat patterns, cueing, sub-division and divided meters, the use of the left hand, asymmetrical and changing meters, terms, phrasing), the mechanics of expressive conducting dynamics, tempi, nuance), effective communication by the conductor, and score study and arranging and the use of the computer and music writing software. Also studied will be learning and theory.

Music – Choral Literature and Conducting 3211

Textbook:

Course Description: Fundamentals of conducting techniques, conducting patterns, physical coordination, the study of literature from the Baroque to the Contemporary, and the communication of rhythmic and other expressive elements in choral music.

Music – Instrumental Literature and Conducting 4207

Textbook: *The Modern Conductor.* Elizabeth A. Green; Prentice Hall Publishers. 2004.

Basic Conducting Techniques: Joseph A. Labuta. Prentice Hall Publishers 2004.

Course Description: Fundamentals of baton techniques with emphasis on selection of literature for instrumental ensembles.

Music - 1104-1105, 2102-2103, 3200-3201, 4200-4201 Applied Music/Low Brass
Trombone/Baritone/Euphonium

Textbooks:

1. Arban's Complete Method for Trombone and Baritone Charles L. Randall and Simone Mantia, Carl Fischer, New York 1936.
2. Melodious Etudes for Trombone Joannes Rochut, Carl Fischer 1978.
3. The Remington Warm-Up Studies Donald Hunsberger, Accura Music, Ohio 1980
4. Rubank Advanced Method Vol. I and II William Gower and H. Voxman, Rubank, Miami 1951.
5. The Art of Trombone Playing Edward Kleinhammer, Summy-Birchard Inc. Florida, 1963.
6. Selected Studies for Trombone/Baritone H. Voxman, Rubank, Chicago, 1951.
7. Studies in Clefs Allen Ostrander, International Music Company, New York 1957.

Music 1104-1105, 2102-2103, 3200-3201, 4200-4201 Applied Music/Low Brass

Tuba

1. Rubank Advanced Method Vol. I and II William Gower and H. Voxman, Rubank, Miami 1951
2. 70 Studies for BB flat Tuba Volume I Vladislav Blazhevich, Robert King Music, North Eaton, Massachusetts, 1974.
3. 24 Artistic Studies for Tuba Frank Woodruff, Southern Music, San Antonio, Texas, 1986.
4. 60 Musical Studies for Tuba, Book I David L. Kuehn, Southern Music, San Antonio, Texas 1969.

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5. The Art of Tuba Playing Edward Kleinhammer, Summy-Birchard Inc.
Florida, 1963.

Music –Applied Music Voice -1104, 1105, 2102, 2103, 3200, 3201, 4200, 4201

Textbook: Walters, Richard, ed.. *Standard Vocal Literature: Book and CD*. New York: Hal Leonard, 2004.

Music – Piano Class I 1160

Textbook: Bastien, Jane Smisor, Lisa and Lori. *Piano for Adults: A Beginning Course. Book 1*. San Diego: Kjos Music Press.1999.

Course Description. A course in practical keyboard facility, sight-reading, elementary improvisation and keyboard harmony. For music majors who do not meet minimum piano proficiency. This course is also open to any student regardless of major.

Music – Piano Class II – 1161

Textbook: Bastien, Jane Smisor, Lisa and Lori. *Piano for Adults: A Beginning Course. Book 1* SandDiego: Kjos Music Press, 1999.

Course Description: A continuation of content and materials in Music 1160, but at the intermediate level. Emphasis on more advanced piano performance techniques, literature, improvisation and advanced keyboard harmony.

Music – Piano Class Intermediate 1162

Textbook: Bastien, Jane Smisor, Lisa and Lori. *Piano for Adults, Book 2*. San Diego: Kjos Music Press, 1999.

Course Description: A continuation of keyboard and musical skills introduced in Music 1161, striving for greater proficiency in keyboard technique, sight reading, improvisation, repertoire and keyboard harmony.

Music - Piano Class 1163

Textbook: Bastien, Jane Smisor, Lisa and Lori. *Piano for Adults, Book 2*. San Diego,. Kjos Music Press, 1999.

Course Description: An advanced course in piano stressing continued development of the skills from the previous levels. There is a greater emphasis on repertoire. Course can be used as preparation for applied piano study.

Music – Voice Class 1231

Textbook: Stanton, Royal. *Steps for Singing for Voice Classes*. 3rd Ed. Prospect Heights, IL: Waveland Press, Inc., 2000.

Course Description: Designed especially for music students who do not study voice privately. An introductory course in vocal habits, tone production, breathing, phrasing, diction and vocal literature.

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Music – Intro to MIDI Studio Recording Techniques 2302

Textbook: Rothstein, Joseph. *MIDI a Comprehensive Introduction* 2nd Ed., A-R Editions; 1995.

Course Description: Designed to introduce students to the fundamental techniques utilized MIDI recording studio through practical application and hands-on experiences. Topics covered include basic synthesis, signal flow and routing, computer driven sequencing and patch editing, signal processing, and a brief introduction to basic two-track direct recording techniques.

Music – Audio for Video Techniques 3300

Textbook: Huber, David Miles. *Audio Productin Techniques for Video*. Howard Sams & Company. 1987. Alten, Stanley. 4th Ed. Audio in Media. *The Recording Studio*. Wadssworth Publishers. 1996.

Course Description: In-depth study of the process used in creating music for and synchronizing music to visual medial. Topics include film scoring, music for television, synchronization signal flow, microphone placement, multi-track recording, audio mixing, signal processing, analog and digital recording, as well as SMPTE and MTC time codes. Course taught in lecture/lab format with outside assignments involving both library research and hands on studio lab work.

Music - Music Business 3302

Textbook: Baskerville. *Music Business Handbook and Career Guide*. 8th Ed.

Course Description. Music Business is a general study of the music industry and music business opportunities. Topics to be covered include the freelance musician, contracts, copyrighting, publishing, music licensing, unions and guilds, artist management, the recording studio environment, recording contracts, taxes and alternative careers in the music industry. Prerequisites: MUSI 2302 and enrollment as a declared SRT major or minor, or permission of the instructor.

Required Textbook for Summer 2010

Music – Public School Music 2350

Textbook: Winslow, Dallins & Kierst Music Skills for Classroom Teachers, 9th Ed. William Brown Publishers

Course Description: For elementary education majors. Fundamentals of music, elementary ear training. And rhythmic skills, playing classroom instruments, performance of simple melodies on the piano, study of appropriate song literature and music terminology for grades K-6.

Music – Band Techniques 3222

Textbook: Walker, Darwin E. *Teaching Music: Managing the Successful Music Program*. 2nd Ed., Schirmer/Thomson Learning Publishers, 1989 & 1998

University of Arkansas at Pine Bluff
Textbook RE: Implementation of Act 175 of 2007
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Course Description: For instrumental majors. A study of the program and purpose of the marching band in public schools. Emphasis placed on types of formation, selection of music, writing and arranging of music scores.

Music -Theory I 1206:

Textbook: *Elementary Harmony* by Robert Ottman, *Elementary Harmony Workbook* by Robert Ottman. 5th Ed. Prentice-Hall Publishers. Prentice Hall, New Jersey. 1998

Course Description: A study of scales, intervals, chords through the ninths. Drills in all diatonic and chromatic scales and intervals.

Music – Sight Singing & Ear Training 1106:

Textbook: *Music for Sight Singing* by Robert Ottman,. 7th Ed.; Prentice Hall Publishers,. Prentice Hall, New Jersey 2006

Course Description: Introductory ear-training and melodic and rhythmic dictation are studied.

Music –Music History and Appreciation 2330

Textbook: *Music An Appreciation by Roger Kamien*. 5th Ed. New York: McGraw Hill Higher Education, 2006.

Course Description: Designed for non-music majors who elect to study music as a cultural experience. A survey and listening course of music literature from several periods and genres.

Music – Instrumental Literature and Conducting 4207

Textbook: *The Modern Conductor*. Elizabeth A. Green; Prentice Hall Publishers. 2004.

Basic Conducting Techniques: Joseph A. Labuta. Prentice Hall Publishers 2004.

Course Description: Fundamentals of baton techniques with emphasis on selection of literature for instrumental ensembles.

Music - Theory III 2210

Textbook: *Advanced Harmony (Theory and Practice)* by Robert Ottman

Course Description: Further develops study of principles of harmonic structures used by composers of the 17th & 18th centuries. Short arranging projects will be assigned and analysis of four-part chorales will be explored further at this level.

Music: Sight-Singing & Ear-Training III 2110

Textbook: Ottman,Robert. *Music for Sight Singing*. Prentice Hall Publishers, Prentice Hall, New Jersey. 2006