615  Gastroenterology Clerkship  
Fall, Spring, Summer. 2 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. RB: (MED 608) R: Open only to graduate-professional students in College of Human Medicine. Experience with gastrointestinal problems in ambulatory and hospital settings. Emphasis on continuity and comprehensive care.

616  Allergy Clerkship  
Fall, Spring, Summer. 2 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. RB: (MED 608) R: Open only to graduate-professional students in College of Human Medicine. Ambulatory and hospital based experience to develop diagnostic skills in allergy. Review of basic therapeutics related to allergic diseases.

618  Infectious Diseases Clerkship  
Fall, Spring, Summer. 2 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. RB: (MED 608) R: Open only to graduate-professional students in College of Human Medicine. Clinical problems in infectious and immunologic diseases. Integrated basic science input is provided in seminars.

619  Ambulatory Care Clerkship  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 15 credits in all enrollments for this course. Interdepartmental with Family Practice, Pediatrics. Administered by Department of Family Practice, RB: (FMP 602) R: Open only to graduate-professional students in College of Human Medicine. Continuous and comprehensive patient care under supervision of appropriate physicians.

622  Endocrinology and Metabolism Clerkship  
Fall, Spring, Summer. 2 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. Interdepartmental with Family Practice; Pediatrics. Administered by Department of Family Practice, RB: (FMP 602) R: Open only to graduate-professional students in College of Human Medicine. SA: MED 620 Clinical and/or clinical-research clerkship: endocrine diseases, electrolyte abnormalities, endocrine hypertension, or diabetes mellitus.

623  Advanced Medicine  
Fall, Spring, Summer. 6 to 12 credits. Fall: Lansing-GR-Saginaw-Flint-Kalamazoo-UP. Spring: Lansing-GR-Saginaw-Flint-Kalamazoo-UP. Summer: Lansing-GR-Saginaw-Flint-Kalamazoo-UP. A student may earn a maximum of 12 credits in all enrollments for this course. RB: (MED 608) R: Open only to graduate-professional students in the College of Human Medicine. Hospital-based clinical experience in diagnosing and managing acutely ill patients with non-surgical problems.

626  Physical Medicine and Rehabilitation Clerkship  
Fall, Spring, Summer. 2 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. RB: (MED 608) R: Open only to graduate-professional students in College of Human Medicine. Developing regimens for physical medicine procedures, occupational therapy and rehabilitation skills.

627  Rheumatology Clerkship  
Fall, Spring, Summer. 2 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. RB: (MED 608) R: Open only to graduate-professional students in College of Human Medicine. Combined ambulatory and hospital consultative clerkship for diagnostic skills in areas of rheumatic diseases.

628  Advanced Internal Medicine  
Fall, Spring, Summer. 2 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. RB: (MED 608) R: Open only to graduate-professional students in College of Human Medicine. Clinical experiences to refine diagnostic and management skills in general internal medicine.

630  Emergency Medicine Clerkship  
Fall, Spring, Summer. 2 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. RB: (MED 608) R: Open only to graduate-professional students in College of Human Medicine. Clinical diagnosis and treatment of emergencies seen in community emergency departments.

632  Occupational Medicine Clerkship  
Fall, Spring, Summer. 2 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. RB: (MED 608) R: Open only to graduate-professional students in College of Human Medicine. Health problems of chemical and mineral dust, radiation, and repetitive trauma.

633  Extended Clinical Experience  
Fall, Spring, Summer. 6(6-0) Fall: All six(6) campuses. Spring: All six(6) campuses. Summer: All six(6) campuses. P.M: (MED 608) Based in community hospitals and ambulatory sites, this is a 4 week clinical experience emphasizing interviewing skills, history, physical exam, problem solving and therapy.

635  Core Competencies I  
Fall, Spring, Summer. 2(2-0) Fall: Flint-GR-Saginaw-Lansing-Kalamazoo-UP. Spring: same as above. Summer: save as above. A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Human Medicine; Family Practice; Pediatrics and Human Development. Administered by College of Human Medicine. Core knowledge and skills from an interdisciplinary perspective.

636  Core Competencies II  
Fall, Spring, Summer. 2(2-0) Fall: same as below. Spring: Flint-Saginaw-GR-Lansing-Kalamazoo-UP. Summer: same as above. A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Human Medicine; Family Practice. Administered by College of Human Medicine. Core knowledge and skills from an interdisciplinary perspective.

637  Core Competencies III  
Fall, Spring, Summer. 2(2-0) Fall: same as below. Spring: Flint-Saginaw-GR-Lansing-Kalamazoo-UP. Summer: Flint-Saginaw-GR-Lansing-Kalamazoo-UP. A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Human Medicine; Family Practice; Obstetrics, Gynecology and Reproductive Biology; Pediatrics and Human Development; Surgery. Administered by College of Human Medicine. Core knowledge and skills from an interdisciplinary perspective.

820  Evidence-Based Medicine  
Spring of even years. 3(3-0) Interdepartmental with Epidemiology. Administered by Department of Epidemiology, P.M: (EPI 810 or concurrently and STT 421 or concurrently) Methodology of clinical epidemiology and health services outcomes research. Linkage of epidemiology with daily clinical problems.

**MICROBIOLOGY MMG AND MOLECULAR GENETICS**

Department of Microbiology and Molecular Genetics College of Natural Science

101  Preview of Microbiology  
Fall. 1(1-0) R: Open only to freshmen or sophomores. SA: MPH 101 Overview of modern microbiology, emphasizing impact on society.

103  Frontiers of Microbiology  
Spring. (2-0) R: Open only to freshmen and sophomores. Current microbiology research: significance to modern biological science and impact on society.

111L  Cell and Molecular Biology Laboratory  
Fall, Spring. Summer. 2(1-3) Interdepartmental with Biological Science; Plant Biology; Zoology. Administered by College of Natural Science. P: (BS111 or concurrently) Not open to students with credit in LBS 150H. Principles and applications of common techniques used in cell and molecular biology.

201  Fundamentals of Microbiology  
Spring. 3(3-0) RB: (CEM 141 or ISP 201 or ISP 207 or ISP 209 or ISP 217) SA: MMG 105, MMG 205 Microbial structure, function, growth, control, and diversity. Role of microbes in health, industry, and the environment.
206 Allied Health Microbiology Laboratory
Spring. 1(0-2) P: (MMG 105 or MMG 205 or concurrently) SA: MPH 206
Fundamentals of microbiological techniques including microscopy, staining, aseptic technique, culture media, identification, control with disinfectants and antibiotics, and safety in the microbiological laboratory.

301 Introductory Microbiology
Fall, Spring. 3(3-0) P: (BS 111 or LBS 145 or LBS 149H) and (CEM 251 or concurrently or CEM 351 or concurrently or CEM 143) SA: MPH 301
Fundamentals of microbiology, including microbial structure and function, nutrition and growth, death and control. Importance and applications of major microbial groups.

302 Introductory Microbiology Laboratory
Spring. 1(0-3) P: (MMG 105 or concurrently or MMG 205 or concurrently or MMG 301 or concurrently) SA: MPH 302
Methodology of microbiology: microscopy, staining, aseptic technique, culture media, quantification, and laboratory safety.

408 Advanced Microbiology Laboratory (W)
Fall. 3(1-6) P: (MMG 302 and MMG 431) or concurrently and completion of Tier I writing requirement. R: Open only to students in the Department of Microbiology and Molecular Genetics or LBS Environmental Biology/Microbiology or Microbiology coordinate major. SA: MIC 408, MPP 403
Microbiological techniques and procedures to study physiology and genetics of bacteria and bacteriophages. Collection and critical assessment of quantitative data and written communication of results.

409 Eukaryotic Cell Biology
Spring. 3(3-0) P: (BS 111 or LBS 145 or LBS 149H) and (BMB 401 or concurrently or BMB 462 or concurrently) SA: MIC 403, MPP 403
Structure and function of nucleated cells. Emphasis on the molecular mechanisms that underlie cell processes.

413 Virology
Spring. 3(3-0) P: (BMB 462 or concurrently) RB: (MMG 409) SA: MPP 403

421 Prokaryotic Cell Physiology
Fall. 3(3-0) P: (MMG 301 and BMB 461 or concurrently) SA: MIC 401, MPP 401
Prokaryotic cell structure and function, Growth and replication. Macromolecular synthesis and control.

425 Microbial Ecology
Spring. 3(3-0) Interdepartmental with Crop and Soil Sciences. RB: (MMG 301) SA: MPH 425
Microbial population and community interactions. Microbial kinetics in natural systems, including associations with plants or animals.

426 Biogeochemistry
Summer. 3 credits. Given only at W.K. Kellogg Biological Station. Interdepartmental with Crop and Soil Sciences; Geological Sciences; Zoology. RB: (BS 110 or LBS 145 or LBS 149H) and (CEM 143 or CEM 251) SA: MPH 426
Integration of the principles of ecology, microbiology, geochemistry, and environmental chemistry. Societal applications of research in aquatic and terrestrial habitats.

431 Microbial Genetics
Fall. 3(3-0) P: (BMB 461 or concurrently) RB: (MMG 301 or ZOL 341) SA: MIC 401, MPP 401
Genetics of bacteria, their viruses, plasmids, and transposons. Emphasis on genetic principles.

433 Microbial Genomics
Spring. 3(2-3) P: (MMG 431) RB: (MPP 421 or BMB 461) and (CSE 101) Structure of microbial genomes and implications for growth and evolution of bacteria and fungi. Computer analysis of genome sequence databases. Applications to gene expression and phylogenetic analysis.

440 Food Microbiology
Spring. 3(3-0) Interdepartmental with Food Science. Administered by Department of Food Science and Human Nutrition. P: (MMG 205 or MMG 301) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores. SA: MPH 440
Major groups of microorganisms of importance to the food industry. Emphasis on ecological, physiological, and public health aspects.

441 Food Microbiology Laboratory
Spring. 2(0-4) Interdepartmental with Food Science. Administered by Department of Food Science and Human Nutrition. P: (FSC 440 or concurrently) and completion of Tier I writing requirement. RB: (MMG 206 or MMG 302) SA: MPH 441
Methods for studying major groups of microorganisms important to the food industry. Isolation, enumeration, characterization, identification, and use of microorganisms.

445 Basic Biotechnology
Fall. 3(3-0) P: (MMG 205 or MMG 301) SA: MPH 445
Growth and genetic improvement of industrial microorganisms. Fermentation fundamentals. Specific classical and recombinant-based bioprocesses and bioconversions of commercial importance.

451 Immunology
Fall. 3(3-0) P: (BS 111 or LBS 145 or LBS 149H) and (BMB 401 or concurrently or BMB 461 or concurrently) RB: (MMG 409) SA: MPH 451

463 Medical Microbiology
Fall. 3(3-0) P: (MMG 205 or MMG 301) RB: (MT 432 or MMG 451) R: Open only to juniors or seniors in the Department of Microbiology and Molecular Genetics or Clinical Laboratory Sciences or Medical Technology major or LBS Environmental Biology/Microbiology or Medical Technology or Microbiology coordinate major. SA: MPH 463
Properties of pathogenic bacteria and viruses and their mechanisms of pathogenicity.

464 Diagnostic Microbiology Laboratory
Fall. 2(0-4) P: (MMG 463 or concurrently) R: Open only to juniors or seniors in the Department of Microbiology and Molecular Genetics or Clinical Laboratory Sciences or Medical Technology major or LBS Environmental Biology/Microbiology or Medical Technology or Clinical Laboratory Science or Microbiology coordinate major. SA: MPH 464, MIC 464
Diagnostic procedures for the identification of pathogenic microbes.

490 Special Problems in Microbiology
Fall, Spring. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Approval of department. SA: MPH 490
Library research or tutorial instruction in advanced laboratory techniques.

491 Current Topics in Microbiology
Spring. 3(4-0) R: Open only to seniors in the Department of Microbiology and Molecular Genetics or LBS Environmental Biology/Microbiology or Microbiology coordinate major. SA: MPH 491
Capstone experience for microbiology majors. Presentation and discussion of journal articles. Writing of position papers. Topics such as microbial physiology, ecology, genetics, molecular biology, virology, immunology, or pathogenesis.

492 Undergraduate Research Seminar
Spring. 1(1-0) P: (MMG 499 or MMG 499H) R: Open only to seniors in the Department of Microbiology and Molecular Genetics or LBS Environmental Biology/Microbiology or Microbiology coordinate major. SA: MPH 492
Presentation and group discussion of undergraduate research results.

499 Undergraduate Research
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to students in the Department of Microbiology and Molecular Genetics or LBS Environmental Biology/Microbiology or Microbiology coordinate major. SA: MPH 499
Participation in a laboratory research project.

499H Honors Research
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to Honors College students in the Microbiology or Environmental Biology/Microbiology major or LBS Environmental Biology/Microbiology coordinate major or LBS Environmental Biology/Microbiology coordinate major. SA: MPH 499H
Research project with thesis and oral report. A portion of Microbiology capstone experience.
Microbiology and Molecular Genetics—MMG

522 Medical Microbiology and Immunology
Spring. 5(4-2) R: Graduate-professional students in colleges of Human and Osteopathic Medicine. SA: MPH 522
Basic principles of microbiology (bacteriology, virology, mycology and parasitology) and immunology and their relation to disease in humans.

561 Veterinary Immunology
Fall. 2(2-0) R: Open only to graduate-professional students in the College of Veterinary Medicine. SA: MPH 561, MIC 561
Concepts of cell biology, immunchemistry, immunobiology, and immunopathology related to the healthy state and the host response to infection and parasitism.

567 Veterinary Microbiology and Infectious Diseases I
Spring. 5(4-3) R: Open only to graduate-professional students in College of Veterinary Medicine. SA: MIC 563, MIC 565, MPH 563, MPH 565 Not open to students with credit in VM 564.
Structure, function, and diagnostic characteristics of bacteria and fungi related to pathogenicity, transmission, control, host response, therapy, and management of selected diseases of animals.

569 Veterinary Microbiology and Infectious Diseases II
Fall. 5(4-3) R: Open only to graduate-professional students in College of Veterinary Medicine. SA: MIC 563, MIC 565, MPH 531C, MPH 531D, MPH 563, MPH 565
Structure, function, and diagnostic characteristics of viruses, protozoa, and helminths related to pathogenicity, transmission, control, host response, therapy, and management of selected diseases of animals.

660 Veterinary Clinical Bacteriology Clerkship
Fall, Spring, Summer. 3 credits. RB: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.
Guided clinical bacteriology experience.

662 Clinical Veterinary Virology Clerkship
Fall, Spring, Summer. 3 credits. RB: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.
Guided clinical virology experience.

664 Veterinary Clinical Parasitology Clerkship
Fall, Spring, Summer. 3 credits. RB: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.
Guided clinical parasitology experience.

690 Veterinary Microbiology Clerkship
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Completion of 5 semesters of the graduate-professional program in the College of Veterinary Medicine. SA: MPH 690
Laboratory-based investigation of microbiological problems pertinent to veterinary medicine.

801 Integrative Microbial Biology
Fall. 4(4-0) Not open to students with credit in MMG 821 or MMG 829 or MMG 841 or MMG 827.
Structural, metabolic, phylogenetic, and genomic diversity of microorganisms and microbial communities. Microbial ecology, evolution, and behavior. Regulation of gene expression. Microbial interactions with other microbes, animals, or plants

803 Topics in Integrative Microbial Biology
Fall, Spring. 2(2-0) A student may earn a maximum of 10 credits in all enrollments for this course. P.M: (MMG 801 or concurrently)
In-depth study of a particular topic from integrative microbial biology.

813 Molecular Virology
Spring of even years. 3(3-0) R: Open only to graduate students in the Colleges of Human Medicine, Osteopathic Medicine, Veterinary Medicine, Natural Science, and Agriculture and Natural Resources. SA: MPH 813
Molecular nature and biochemistry of replication of animal viruses. Current advances, research concepts, and the role of viruses in molecular biology research.

821 Microbial Physiology
Fall of even years. 3(3-0) RB: (MMG 421) R: Open only to graduate students in the Colleges of Human Medicine, Osteopathic Medicine, Veterinary Medicine, Natural Science, and Agriculture and Natural Resources. SA: MPH 821
Molecular architecture, assembly of cell parts, metabolism, and general physiology of typical eubacteria.

825 Cell Structure and Function
Spring. 3(3-0) Interdepartmental with Biochemistry and Molecular Biology; Physiology. Administered by Department of Biochemistry and Molecular Biology. RB: BMB 401 or BMB 461. SA: BCH 825
Molecular basis of structure and function. Cell properties: reproduction, dynamic organization, integration, programmed and integrative information transfer. Original investigations in all five kingdoms.

827 Diversity of Prokaryotes
Fall of odd years. 3(3-0) RB: (BMB 461 and MMG 421 or concurrently) R: Open only to graduate students in the Colleges of Human Medicine, Osteopathic Medicine, Veterinary Medicine, Natural Science, and Agriculture and Natural Resources. SA: MPH 827
Morphological and physiological properties of groups of bacteria and archaea. Relationship of those properties to ecological niche and importance.

829 Advanced Microbial Ecology
Spring of odd years. 3(3-0) Interdepartmental with Crop and Soil Sciences.
Functional roles of microorganisms, their population dynamics and interactions, and their mechanisms of evolutionary change in natural communities, laboratory experiments, and mathematical models.

833 Microbial Genetics
Fall. 3(3-0) R: Open only to graduate students in the Colleges of Human Medicine, Osteopathic Medicine, Veterinary Medicine, Natural Science, and Agriculture and Natural Resources. SA: MPH 833
Gene structure and function. Genetic regulation at classical and molecular levels in prokaryotes and lower eukaryotes.

835 Eukaryotic Molecular Genetics
Spring. 3(3-0) Interdepartmental with Genetics. RB: (BMB 462 and ZOL 341) R: Open only to graduate students in the Colleges of Agriculture and Natural Resources, Engineering, Human Medicine, Natural Science, Osteopathic Medicine, and Veterinary Medicine.
Gene structure and function in animals, plants, and fungi. Basic aspects of modern human genetics and the genetic basis for disease. Molecular genetic analyses. Eukaryotic modeling systems.

841 Soil Microbiology
Spring of even years. 3(3-0) Interdepartmental with Crop and Soil Sciences. RB: (MMG 425) SA: MPH 841
Ecology, physiology, and biochemistry of microorganisms indigenous to soil.

851 Immunology
Fall of odd years. 3(3-0) R: Open only to graduate students in the Colleges of Human Medicine, Osteopathic Medicine, Veterinary Medicine, Natural Science, and Agriculture and Natural Resources. SA: MPH 851
Functional aspects of immune responses; synthesis, structure, and function of effector molecules; cell-cell interactions; current advances and research techniques.

855 Molecular Evolution: Principles and Techniques
Fall of odd years. 3(3-0) R: Open only to graduate students in the Colleges of Human Medicine, Osteopathic Medicine, Veterinary Medicine, Natural Science, and Agriculture and Natural Resources. Approval of department. SA: MPH 890
Current techniques used to characterize and compare genes and genomes. Genetic variation, assays of variation. Data analysis and computer use to conduct a phylogenetic analysis to compare organisms and infer relationships.

861 Advanced Microbial Pathogenesis
Spring of odd years. 3(3-0) RB: (MMG 461 or MMG 409)
Molecular basis of microbial virulence. Virulence factors of microorganisms and the relationship of these factors to disease; host-pathogen interactions.

890 Special Problems in Microbiology
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Open only to graduate students in the Colleges of Human Medicine, Osteopathic Medicine, Veterinary Medicine, Natural Science, and Agriculture and Natural Resources. Approval of department. SA: MPH 890
Individualized laboratory or library research.

892 Seminar
Fall, Spring. 1(1-0) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to graduate students in College of Agriculture and Natural Resources, College of Engineering, College of Human Medicine, College of Natural Science, College of Osteopathic Medicine, or College of Veterinary Medicine. SA: MPH 892
Student review and presentation of selected topics in microbiology and public health.
MILITARY SCIENCE  

Department of Military Science
Office of the Provost

101A  Leadership: The Military Profession  
Spring. 1(1-2) SA: MS 101 Not open to students with credit in MS 101B.  
Introduction to military leadership and fundamental concepts of leadership. Application of leadership doctrine. The role of the U.S. Army, Army Reserves, and National Guard. Leadership laboratory introduces basic military skills.

101B  Leadership: The Military Profession  
Spring. 1(1-2) SA: MS 101 Not open to students with credit in MS 101A.  
Introduction to military leadership and fundamental concepts of leadership. Application of leadership doctrine. The role of the U.S. Army, Army Reserves, and National Guard. Leadership laboratory introduces basic military skills.

120  Introduction to Army Leadership and Problem Solving  
Spring. 1 to 2 credits. RB: (MS 101A or MS 101B)  
Fundamentals of basic Army leadership. Military problem solving process. Military briefing and writing skills. Goal setting and time management. Introduction to the Army’s development counseling program.

201A  Leadership: The Military Leader  
Fall. 1(1-1) SA: MS 201 Not open to students with credit in MS 201B.  
Introduction to effective leadership. Communications. Value of the United States Army. Responsibilities of military officers and professionalism. Laboratory includes tactics, marksmanship training, and military skills.

201B  Leadership: The Military Leader  
Spring. 1(1-2) SA: MS 201 Not open to students with credit in MS 201A.  
Introduction to effective leadership. Communications. Value of the United States Army. Responsibilities of military officers and professionalism. Laboratory includes tactics, marksmanship training, and military skills.

MUSIC

School of Music  
College of Arts and Letters

112  Chamber Music  
Fall, Spring. 1(0-2) A student may earn a maximum of 10 credits in all enrollments for this course. R: Open only to students in the School of Music.  
Rehearsal and performance of a broad range of chamber music literature.

113  Philharmonic Orchestra  
Fall, Spring. 1(0-5) A student may earn a maximum of 10 credits in all enrollments for this course. RB: High school and/or youth orchestra experience or other college or university ensemble experience. R: Audition required.  
Rehearsal and performance of symphonic and operatic repertoire.

114  Marching Band  
Fall. 1(0-9) A student may earn a maximum of 6 credits in all enrollments for this course. R: Audition required.  
Rehearsal and performance of broad range of marching band literature at football games.

115  Spartan Brass  
Spring. 1(0-2) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to juniors or seniors. Approval of department.  
Rehearsal and performance of broad range of brass literature at basketball and hockey games.

116  Campus Band  
Fall, Spring. 1(0-3) A student may earn a maximum of 10 credits in all enrollments for this course. R: Audition required.  
Rehearsal and performance of broad range of brass literature chosen from baroque period to the present.

117  Concert Band  
Fall. 1(0-3) A student may earn a maximum of 10 credits in all enrollments for this course. R: Audition required.  
Rehearsal and performance of broad range of wind literature from various historical periods and styles.

118  Wind Symphony  
Fall. 1(0-6) A student may earn a maximum of 10 credits in all enrollments for this course. R: Audition required.  
Rehearsal and performance of broad range of wind literature from various periods and styles.

119  Symphony Band  
Fall. 1(0-4) A student may earn a maximum of 10 credits in all enrollments for this course. R: Audition required.  
Rehearsal and performance of a broad range of wind and percussion literature.

120  Symphony Orchestra  
Fall, Spring. 1(0-6) A student may earn a maximum of 10 credits in all enrollments for this course. R: Audition required.  
Rehearsal and performance of symphonic and operatic repertoire.