

MICHIGAN STATE UNIVERSITY
University Committee on Curriculum

SUBCOMMITTEE A – AGENDA

Via Teams
January 22, 2026
1:30 p.m.

PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

LYMAN BRIGGS COLLEGE

1. Request to recognize the **Applied Conservation Biology** major leading to the Bachelor of Science degree in the Department of Fisheries and Wildlife as a **Coordinate Major in Lyman Briggs College**. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its meeting on January 8, 2026.

Effective Summer 2026.

2. Request to recognize the **Aquatic Ecology and Management** major leading to the Bachelor of Science degree in the Department of Fisheries and Wildlife as a **Coordinate Major in Lyman Briggs College**. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its meeting on January 8, 2026.

Effective Summer 2026.

3. Request to recognize the **Fish Ecology and Management** major leading to the Bachelor of Science degree in the Department of Fisheries and Wildlife as a **Coordinate Major in Lyman Briggs College**. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its meeting on January 8, 2026.

Effective Summer 2026.

4. Request to recognize the **Wildlife Ecology and Management** major leading to the Bachelor of Science degree in the Department of Fisheries and Wildlife as a **Coordinate Major in Lyman Briggs College**. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its meeting on January 8, 2026.

Effective Summer 2026.

PART II - NEW COURSES AND CHANGES

COLLEGE OF AGRICULTURE AND NATURAL RESOURCES

ANS 210	Introduction to Disciplines in Animal Agriculture Fall of every year. Spring of every year. 3(3-0) P: ANS 110 or concurrently <u>Problem solving and literature searches with realistic examples to demonstrate multi-disciplinary scientific solutions in Animal Science. Overview of major disciplines in animal science: behavior and welfare, genetics, health and toxicology, products, reproduction, and nutrition</u> Effective Fall Semester 2025
ANS 314	<u>Genetic Improvement of Domestic Animals (W) Genetic Improvement of Domestic Animals</u> Spring of every year. 4(4-0) P: ((BS 161 or BS 181H or LB 145) and completion of Tier I writing requirement) and (STT 200 or STT 201 or STT 421 or STT 464 or STT 231) P: (BS 161 or BS 181H or LB 145) and (STT 200 or STT 201 or STT 421 or STT 464 or STT 231) and ANS 210 R: Open to students in the Animal Science Major and open to students in the Lyman Briggs Animal Science Coordinate Major. Molecular, Mendelian, population, and quantitative genetics of domestic animals. Effective Spring Semester 2026
<u>CEM 482</u> <u>FSC 482</u>	Science and Technology of Wine Production Fall of every year. 3(2-3) <u>Interdepartmental with Chemical Engineering, Food Science Interdepartmental with Chemical Engineering</u> P: CEM 143 or CEM 251 or CEM 351 RB: Must be at least 21 years of age. R: Open to seniors or graduate students in the Department of Biosystems and Agricultural Engineering or in the Department of Chemical Engineering and Materials Science or in the Department of Chemistry or in the Department of Food Science and Human Nutrition or in the Department of Horticulture or in the Department of Microbiology and Molecular Genetics or in the Lyman Briggs Chemistry Coordinate Major. Approval of department. Origin and history of wine and wine production. Determination and timing of harvest, methods of postharvest handling, storage, and processing of grapes into juice and wine. Physical and chemical changes in wine and processes. Analysis of must and its adjustment, fermentation, fining, and aging. Physiology of yeasts and bacteria involved in winemaking and spoilage. Cellar practices, problems, and operations. Effective Fall Semester 2026
HNF 377	Applied Community Nutrition Fall of every year. 3(3-0) P: HNF 250 or HNF 320 R: Open to juniors or seniors in the Dietetics Major or in the Nutritional Sciences Major or in the Lyman Briggs Nutritional Sciences Coordinate Major. <u>Skills necessary for a community nutrition practitioner including community needs assessment and relevant related programs. Health policy, advocacy, and education evaluation and development.-Learn the skills necessary for a community nutrition practitioner including conducting community needs assessments, developing and evaluating nutrition education programs, and understanding the role of health policy and advocacy.</u> Effective Fall Semester 2026
HNF 844	<u>Management and Professional Skills in Dietetics Leadership and Professional Skills in Dietetics</u> <u>Fall of every year. Spring of every year. 3(3-0) RB: Completion of a practicum in dietetics after undergraduate dietetic and nutrition courses. R: Open to master's students in the Nutrition and Dietetics Major or approval of department.</u> <u>Dietetic career skills including collaboration, communication, human resources, budgeting, goal setting, and team productivity. Dietetic career skills including leadership development, collaboration, communication, human resources, financial management, performance improvement, and goal setting.</u> Effective Spring Semester 2026

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HNF 850	<p>Nutrition and Adult Mental Health <u>Spring of every year. Fall of every year.</u> 3(3-0) RB: Undergraduate degree in Dietetics R: Open to master's students in the College of Agriculture and Natural Resources or in the Department of Food Science and Human Nutrition or in the Nutrition and Dietetics Major or approval of department. Explores the intersection of where nutrition, food and the registered dietitian plays a role in supporting individuals with mental and behavioral health related diagnoses and care settings. Effective Spring Semester 2026</p>
<u>PLB 863</u> <u>HRT 863</u>	<p>Environmental Plant Physiology <u>Spring of odd years.</u> 3(3-0) <u>Interdepartmental with Horticulture</u> <u>Interdepartmental with Plant Biology</u> RB: PLB 301 or PLB 414 or PLB 415 Interaction of plant and environment. Photobiology, thermophysiology, and plant-water relations. SA: BOT 863 Effective Fall Semester 2025</p>
CROP 192	<p>Professional Development Seminar I Fall of every year. 1(0-2) R: Open to students in the Department of Plant, Soil and Microbial Sciences or in the Agricultural Industries Major. <u>Career exploration and preparation, and written, verbal, and visual communication in crop and soil sciences</u> <u>Career exploration and preparation, and written, verbal, and visual communication in cropping systems science and environmental soil and water science</u>. <u>Request the use of the Pass-No Grade (P-N) system</u>. SA: CSS 192 Effective Fall Semester 2026</p>
CROP 492	<p>Professional Development Seminar II (W) Fall of every year. 1(0-2) P: (CROP 192) and Completion of Tier I Writing Requirement R: Open to seniors in the Department of Plant, Soil and Microbial Sciences. <u>Professionalism and proficiency in oral and written communication skills in agronomy and turfgrass, including life skills</u>. <u>Professionalism and proficiency in oral and written communication skills in cropping systems science and environmental soil and water science, including life skills</u>. <u>Request the use of the Pass-No Grade (P-N) system</u>. SA: CSS 492 Effective Fall Semester 2026</p>
TURF 232	<p>Turf Cultural Practices Fall of every year. 2(1-2) P: (SOIL 210 or concurrently) and (TURF 212 or concurrently) C: <u>TURF 202 concurrently</u> C: <u>TURF 202 concurrently</u> Establishing and maintaining golf courses and athletic fields, operating equipment, and using literature resources related to turf. SA: CSS 232 <u>DELETE COURSE</u> Effective Summer Semester 2026</p>
TURF 242	<p>Turf Cultural Practices Fall of every year. 2(1-2) R: Open to undergraduate students. C: TURF 212 concurrently and SOIL 210 concurrently</p>
NEW	<p>Experiential learning in establishing and maintaining golf courses and athletic fields. Familiarization with safe and effective techniques for operating turf maintenance equipment. SA: CSS 232, TURF 232 Effective Fall Semester 2026</p>

COLLEGE OF HUMAN MEDICINE

FM 615	Addiction Medicine Fall of every year. Spring of every year. Summer of every year. 3 credits. 3(3-0) P: HM 556 P: HM 552 R: Open to graduate-professional students in the College of Human Medicine. Overview of addiction medicine including training in medication assisted therapy for opioid use disorder, safer medication prescribing for pain management, and prevention and treatment of overuse disorder of multiple substances. Request the use of the Pass-No Grade (P-N) system. Request the use of ET-Extension to postpone grading. The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment. Effective Spring Semester 2026
HM 606	Student-Designed Non-Clinical Elective Fall of every year. Spring of every year. Summer of every year. 3 to 6 credits. A student may earn a maximum of 24 credits in all enrollments for this course. P: HM 556 P: HM 552 R: Open to graduate-professional students in the College of Human Medicine. Customized experience of medically-related skills and knowledge. Request the use of the Pass-No Grade (P-N) system. Request the use of ET-Extension to postpone grading. The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment. Effective Spring Semester 2026
HM 614	Student-Designed Clinical Elective Fall of every year. Spring of every year. Summer of every year. 3 to 6 credits. A student may earn a maximum of 24 credits in all enrollments for this course. P: HM 556 P: HM 552 R: Open to graduate-professional students in the College of Human Medicine. Customized experience of clinical science skills and knowledge in a patient care setting. Request the use of the Pass-No Grade (P-N) system. Request the use of ET-Extension to postpone grading. The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment. Effective Spring Semester 2026
HM 660	Rural Health Leadership: Strategies for Effective Community Care Spring of every year. 3(3-0) P: HM 552 R: Open to graduate-professional students in the College of Human Medicine.
NEW	Experience in rural healthcare and leadership, including advocacy, hands-on point-of-care ultrasound training, street medicine, sports medicine, treatment of substance use disorders, basic rural emergency dept skill practice, and community service initiatives. <u>Request the use of the Pass-No Grade (P-N) system.</u> <u>Request the use of ET-Extension to postpone grading.</u> <u>The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.</u> Effective Spring Semester 2026
HM 661	Narrative Medicine Spring of every year. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P: HM 552 R: Open to graduate-professional students in the College of Human Medicine. Applying the skills and perspectives of the humanities to the experience of patients, health care providers, and communities. Students will read and engage with the works of others, and create their own narrative works. <u>Request the use of the Pass-No Grade (P-N) system.</u> <u>Request the use of ET-Extension to postpone grading.</u> <u>The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.</u> Effective Spring Semester 2026

HM 662	<p>Caring for the Medically Underserved Spring of every year. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P: HM 552 R: Open to graduate-professional students in the College of Human Medicine.</p> <p>Community-engaged course explores the importance of caring for the medically underserved through immersive learning using a mixture of didactics, community exploration, and clinical activities.</p> <p><u>Request the use of the Pass-No Grade (P-N) system.</u> <u>Request the use of ET-Extension to postpone grading.</u> <u>The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.</u></p> <p>Effective Spring Semester 2026</p>
HM 663	<p>Advocacy Skills Spring of every year. 3(3-0) P: HM 552 R: Open to graduate-professional students in the College of Human Medicine.</p> <p>Introduction to the foundational skills needed to become effective physician-advocates, gaining an understanding of the policy landscape that influences patient care and public health while developing practical advocacy tools.</p> <p><u>Request the use of the Pass-No Grade (P-N) system.</u> <u>Request the use of ET-Extension to postpone grading.</u> <u>The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.</u></p> <p>Effective Spring Semester 2026</p>
HM 664	<p>Special Topics in Bioethics: Disability Studies Spring of every year. 3(3-0) A student may earn a maximum of 3 credits in all enrollments for this course. P: HM 552 R: Open to graduate-professional students in the College of Human Medicine.</p> <p>Introduction to topics at the intersections of bioethics and disabilities studies, including disability models, representation of disabled people in the healthcare profession, the relationships between disability and the aims of medicine and health disparities.</p> <p><u>Request the use of the Pass-No Grade (P-N) system.</u> <u>Request the use of ET-Extension to postpone grading.</u> <u>The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.</u></p> <p>Effective Spring Semester 2026</p>
HM 691	<p>Research Clerkship Fall of every year. Spring of every year. Summer of every year. 3 to 6 credits. A student may earn a maximum of 24 credits in all enrollments for this course. P: HM 552 R: Open to graduate-professional students in the College of Human Medicine. Approval of college.</p> <p><u>Data gathering, analysis, interpretation, and presentation of a biological, behavioral, or clinical research project.</u> <u>Data gathering, analysis, interpretation, or presentation of a biological, behavioral, or clinical research project.</u></p> <p>Request the use of the Pass-No Grade (P-N) system. Request the use of ET-Extension to postpone grading. The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.</p> <p>Effective Spring Semester 2026</p>
PHD 650	<p>Introduction to Child Health Spring of every year. 3(3-0) P: HM 552 R: Open to graduate-professional students in the College of Human Medicine.</p> <p>With clinical observations, simulation-based learning, hands-on skills training, and community engagement, students will gain insight into the care of children across multiple care settings.</p> <p><u>Request the use of the Pass-No Grade (P-N) system.</u> <u>Request the use of ET-Extension to postpone grading.</u> <u>The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.</u></p> <p>Effective Spring Semester 2026</p>

ANTR 585	<p>Directed Study in Human Prosection</p> <p>Fall of every year. Spring of every year. Summer of every year. 1 to 5 credits. A student may earn a maximum of 15 credits in all enrollments for this course. <u>P: ANTR 510 or OST 510 P: OST 510 or HM 552</u> R: Open to human medicine students or osteopathic medicine students. Approval of department.</p> <p>Prosection of selected regions and isolated structures of preserved human cadavers. Oral presentation.</p> <p>Request the use of ET-Extension to postpone grading.</p> <p>The work for the course must be completed and the final grade reported within 1 semester after the end of the semester of enrollment.</p> <p>Effective Spring Semester 2026</p>
RAD 591	<p>Introduction to Radiology</p> <p>Spring of every year. 3(3-0) A student may earn a maximum of 3 credits in all enrollments for this course. P: HM 552 R: Open to graduate-professional students in the College of Human Medicine.</p>
NEW	<p>Introduction to radiology modalities, including x-ray, ultrasound, CT, MRI, and other advanced techniques.</p> <p><u>Request the use of the Pass-No Grade (P-N) system.</u></p> <p><u>Request the use of ET-Extension to postpone grading.</u></p> <p><u>The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.</u></p> <p>Effective Spring Semester 2026</p>

COLLEGE OF NATURAL SCIENCE

BMB 200	<p>Introduction to Biochemistry</p> <p>Fall of every year. Summer of every year. 4(4-0)-P: CEM 143 or CEM 251 or CEM 351 or LB 271 P: <u>CEM 144 or CEM 251 or CEM 351 or LB 271</u> RB: CEM 252 or CEM 352</p> <p>Introductions to the major classes of biomolecules and the metabolism of these molecules.</p> <p>SA: BCH 200</p> <p>Effective Fall Semester 2026</p>
BMB 401	<p>Comprehensive Biochemistry</p> <p>Fall of every year. Spring of every year. Summer of every year. 4(4-0)-P: CEM 252 or CEM 352 P: <u>(CEM 251 or CEM 351 or LB 271) and (CEM 252 or CEM 352)</u> RB: BS 161 or BS 181H or LB 145 R: Not open to students in the Biochemistry and Molecular Biology/Biotechnology Major or in the Biochemistry and Molecular Biology major or in the Lyman Briggs Biochemistry and Molecular Biology Coordinate Major or in the Lyman Briggs-Biochemistry/Biotechnology Coordinate Major.</p> <p>Structure and function of major biomolecules, organization and regulation of metabolic pathways. Special emphasis on eukaryotic systems and the biochemical basis of human disease.</p> <p>SA: BCH 401</p> <p>Effective Fall Semester 2026</p>
CEM 143	<p>Survey of Organic Chemistry</p> <p>Fall of every year. Spring of every year. Summer of every year. 4(3-3) P: CEM 141 or CEM 151 or CEM 181H or LB 171 Not open to students with credit in CEM 351 or CEM 144 or CEM 251 or LB 271.</p> <p>Survey of the main organic functional groups with applications to everyday life, industry, and biology and laboratory to highlight important organic laboratory techniques.</p> <p><u>DELETE COURSE</u></p> <p>Effective Fall Semester 2026</p>

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CEM 144	<p><u>Organic Chemistry and Applications</u> <u>Organic Chemistry Survey and Applications</u> Fall of every year. Spring of every year. Summer of every year. <u>3(3-0) 4(4-0)</u> P: CEM 141 or CEM 151 or CEM 181H or LB 171 R: <u>Approval of department</u>. R: <u>Open to undergraduate students</u>. Not open to students with credit in CEM 351 or CEM 143 or CEM 251 or LB 271. Survey of the main organic functional groups with applications to everyday life, industry, and biology. Effective Fall Semester 2026</p>
CEM 145L	<p>Basic Organic Chemistry Laboratory Fall of every year. Spring of every year. <u>1(0-2)</u> P: (CEM 144 or concurrently) and CEM 161 Not open to students with credit in CEM 255.</p>
NEW	<p>Introduction to fundamental laboratory techniques in organic chemistry. Experience in synthesis, purification and data analysis of organic compounds. Effective Fall Semester 2026</p>
CEM 434	<p>Advanced Analytical Chemistry Fall of every year. <u>3(3-1) 4(4-0)</u> P: CEM 395 and CEM 352 and CEM 484 R: <u>Open to undergraduate students</u>. Instrumental methods of analysis, including spectroscopy, chromatography, and electrochemistry. SA: CEM 361, CEM 362 Effective Fall Semester 2026</p>
GLG 330	<p>Biogeochemistry Spring of every year. <u>3(3-0)</u> P: CEM 141 or CEM 151 or CEM 181H or LB 171 RB: (GLG 200 or GLG 201 or GEO 206 or IBIO 355) and CEM 161 Physical, chemical, and biological processes that govern the flow of chemical elements. How humans have altered the movement of these chemical elements through the environment. Biogeochemical cycling of elements between the hydrosphere, lithosphere, atmosphere, and biosphere across time and space. <u>DELETE COURSE</u> Effective Spring Semester 2027</p>
GLG 435	<p>Geomicrobiology (W) Spring of odd years. <u>4(3-2) 4(4-0)</u> Interdepartmental with Microbiology, Genetics, and Immunology P: Completion of Tier I Writing Requirement P: (GLG 200 or GLG 201 or GLG 203 or MGI 201 or BS 161 or LB 145) and completion of Tier I writing requirement RB: GLG 201 or MGI 201 or BS 161 or LB 145 R: Open to juniors or seniors or graduate students in the College of Natural Science or in the Lyman Briggs College. R: Open to juniors or seniors or graduate students in the . Geological and microbiological perspectives on microbial activities in diverse environmental settings, including geological change mediated by microorganisms, microbial evolution driven by geologically diverse habitats. Effective Fall Semester 2026</p>
GLG 498	<p><u>Topics in Geological Sciences</u> <u>Topics in Earth and Environmental Sciences</u> On Demand. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. P: GLG 201 and GLG 304 or approval of department P: GLG 321 and GLG 304 or approval of department R: Open to juniors or seniors or graduate students in the Department of Geological Sciences or in the Lyman Briggs Environmental Geosciences Coordinate Major or in the Lyman Briggs Geological Sciences Coordinate Major. R: Open to juniors or seniors or graduate students in the Department of Earth and Environmental Sciences. Selected topics in geological and geoenvironmental sciences supplementing or expanding specific topics, or examining topics not covered in regular courses. <u>Selected topics in geological and environmental sciences supplementing or expanding specific topics, or examining topics not covered in regular courses.</u> Effective Fall Semester 2026</p>

GLG 499	<p><u>Independent Study in Geological Sciences</u> <u>Independent Study in Earth and Environmental Sciences</u></p> <p>Fall of every year. Spring of every year. Summer of every year. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. <u>R: Open to seniors or juniors in the Department of Geological Sciences or in the Lyman Briggs Earth Science Interdepartmental Coordinate Major or in the Lyman Briggs Environmental Geosciences Coordinate Major or in the Lyman Briggs Geological Sciences Coordinate Major. Approval of department; application required.</u> <u>R: Open to juniors or seniors in the College of Natural Science or in the Lyman Briggs College or in the Department of Earth and Environmental Sciences or in the Lyman Briggs Earth Science Major or in the Lyman Briggs Earth Science-Interdepartmental Coordinate Major. Approval of department; application required.</u></p> <p><u>Advanced individual study of special topics in the geological sciences. Advanced individual study of special topics in the Earth and environmental sciences.</u></p> <p>Effective Fall Semester 2026</p>
MTH 330	<p>Higher Geometry</p> <p><u>Fall of every year. Spring of every year. Summer of every year. Fall of every year. Spring of every year.</u> <u>3(3-0) P: MTH 301 or MTH 299 or MTH 317H P: MTH 299 or MTH 317H</u></p> <p>Topics in transformations: isometries, similarities, inversion. Advanced Euclidean geometry: theorems of Menelaus, Ceva, and Desargues. Cross ratio, harmonic points, analytic, metric, and vector methods, and convexity.</p> <p>Effective Spring Semester 2026</p>
MTH 340	<p>Ordinary Differential Equations I</p> <p>Fall of every year. Spring of every year. <u>3(3-0) P: (MTH 309 or MTH 317H) and (MTH 133 or MTH 153H or LB 119) P: MTH 309 or MTH 314 or MTH 317H</u> Not open to students with credit in MTH 347H.</p> <p>Techniques for solving differential equations, existence and uniqueness theorems, qualitative theory, Fourier series and applications.</p> <p>Effective Fall Semester 2026</p>
MTH 416	<p>Introduction to Algebraic Coding</p> <p><u>Fall of every year. 3(3-0) P: MTH 309 or MTH 317H P: MTH 310 or MTH 418H RB: MTH 310</u></p> <p>Concepts and techniques of abstract algebra applied to the design of communication systems for use in imperfect circumstances. Theory of codes designed by algebraic means.</p> <p>Effective Fall Semester 2026</p>
MTH 425	<p>Complex Analysis</p> <p><u>Spring of every year. 3(3-0) P: MTH 320 P: MTH 320 or MTH 327H</u> Not open to students with credit in MTH 428h.</p> <p>Analytic functions of a complex variable, Cauchy integral theorem, conformal maps, bilinear transformation, harmonic functions. Classification of singularities, residues, conformal mappings.</p> <p>Effective Spring Semester 2027</p>
MTH 428H	<p>Honors Complex Analysis</p> <p><u>Fall of every year. 3(3-0) P: MTH 327H R: Approval of department.</u></p> <p>Analytic functions of a complex variable, line integrals and harmonic functions, Cauchy's theorem and integral formula, power series, Laurent series, isolated singularities, residue calculus, Rouche's theorem, automorphisms of the disk, the Riemann mapping theorem.</p> <p><u>DELETE COURSE</u></p> <p>Effective Fall Semester 2026</p>
MTH 481	<p>Discrete Mathematics I</p> <p><u>Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: (MTH 309 or MTH 317H) or (MTH 299 and MTH 314)</u></p> <p>Binomial and multinomial theorems. Graphs and digraphs, graph coloring. Generating functions, asymptotic analysis, trees. Representing graphs in computers.</p> <p>Effective Summer Semester 2026</p>

MGI 494L	<p>Summer Undergraduate Research Institute in Genomics (W) Summer of every year. 3(2-12) P: (Completion of Tier I Writing Requirement) and (MGI 301 and MGI 302) RB: MGI 431 or IBIO 341 R: Open to undergraduate students in the Environmental Biology/Microbiology Major or in the Genomics and Molecular Genetics Major or in the Microbiology Major. Not open to students with credit in MGI 408 or MGI 434.</p> <p>Directed independent research in teams using state-of-the- art genetic and genomic methods. Offered first half of semester.</p> <p>SA: MMG 494L</p> <p><u>DELETE COURSE</u></p> <p>Effective Summer Semester 2026</p>
PHY 215B	<p>Thermodynamics and Modern Physics Summer of every year. 3 credits. P: {(PHY 184 or PHY 294H or LB 274 or (PHY 184B or concurrently)) or (PHY 232 and (PHY 234B or concurrently)) or (PHY 232C and (PHY 234B or concurrently))} and ((MTH 234 or concurrently) or (MTH 254H or concurrently) or (LB 220 or concurrently)) Not open to students with credit in PHY 215.</p> <p>Thermodynamics, atomic physics, quantized systems, nuclear physics, solids, elementary particles. This course is given in the competency based instruction format.</p> <p><u>DELETE COURSE</u></p> <p>Effective Fall Semester 2025</p>
PHY 491	<p>Introduction to Condensed Matter Physics Fall of every year. 3(3-0) P: (PHY 471 and PHY 410) and completion of Tier I writing requirement <u>Not open to students with credit in PHY 801</u>.</p> <p>Many-electron atoms. Molecules, crystal structure, lattice dynamics. Band models of metals and semiconductors, transport properties.</p> <p>Effective Fall Semester 2026</p>
PHY 492	<p>Introduction to Nuclear Physics Spring of every year. 3(3-0) P: (PHY 471) and completion of Tier I writing requirement RB: PHY 472 <u>R: Open to undergraduate students in the Department of Physics and Astronomy or in the Lyman Briggs Physics Coordinate Major or approval of department. Not open to students with credit in PHY 802</u>.</p> <p>Survey of phenomena and conceptual foundations of nuclear physics.</p> <p>Effective Fall Semester 2026</p>
PLB 201	<p>Plant Structure-Function Fall of every year. Spring of every year. 5(4-2) R: Open to undergraduate students in the Department of Fisheries and Wildlife or in the Department of Forestry or in the Department of Plant Biology or in the Department of Plant, Soil and Microbial Sciences or in the Department of Horticulture or in the Environmental Biology/Plant Biology Major or in the Plant Biology Major or in the Biology Disciplinary Teaching Minor.</p>
NEW	<p>The relationship between structure and function is a core concept across biological disciplines. This course explores plant diversity from a structure-function perspective with a critical focus on the ecological and evolutionary significance of variation among plant taxonomic groups.</p> <p>Effective Fall Semester 2026</p>
STT 231	<p>Statistics for Scientists Fall of every year. Spring of every year. Summer of every year. <u>3(4-0) 4(4-0)</u> P: MTH 124 or MTH 132 or MTH 152H or LB 118 R: Open to students in the College of Natural Science and open to students in the Lyman Briggs College.</p> <p>Calculus-based course in probability and statistics. Probability models, and random variables. Estimation, confidence intervals, tests of hypotheses, and simple linear regression with applications in sciences.</p> <p>SA: STT 331</p> <p>Effective Fall Semester 2025</p>