## GRADUATE MAJOR CHANGE BULLETIN NO. 1 Fall 2011

## Faculty Senate Approved 10/20/11

The requirements and courses listed below reflect the graduate major curricular changes approved by the Catalog Subcommittee and the Graduate Studies Committee since approval of the last Graduate Major Change Bulletin. All new and revised courses are printed in their entirety under the headings Proposed and Current, respectively. The column to the far right indicates the date each change becomes effective.

Prefix	Course Number	New Revise Drop	Current	Proposed	Effective Date
Biological Sciences, revise MS in Zoology	N/A	Revise	Minimum of 21 total graded credits at the 400 or 500 level Minimum of 9 graded credits with Biol prefix UNIV 590 (preparation for college teaching) <del>Courses from each of the 3</del> <del>areas of our core curriculum (ecology, evolution and physiology)</del> 1 credit of special topics (Biol 589; included in the 21 credit minimum) 1 credit of exit seminar (Biol 500; ungraded) Transfer credits follow graduate school requirements (up to 50% of graded credits)	Minimum of 21 total graded credits at the 400 or 500 level Minimum of 9 graded credits with Biol prefix <u>Substitution of a course on</u> teaching (initially to be taught as <u>Biol 589, a but a new course</u> proposal will be forthcoming) for new students in the program (substituting for UNIV 590)* <u>Addition of a course on research</u> proposal design and grant writing (currently Biol 589)* 1 additional credit of special topics (Biol 589; included in the 21 graded credit minimum) 1 credit of exit seminar (Biol 500; ungraded) Transfer credits follow graduate school requirements (up to 50% of graded credits)	8-12
Biological Sciences, revise PhD in Zoology	N/A	Revise	Minimum of <del>34</del> total graded credits at the 400 or 500 level Minimum of <del>15</del> graded credits with Biol prefix UNIV 590 (preparation for college teaching) <del>Courses from each of the 3</del> <del>areas of our core curriculum (ecology, evolution and physiology)</del> 2 credits of special topics (Biol 589; included in the 21 credit minimum) 2 credits of proposal defense (Biol 501; ungraded)	Minimum of <u>21</u> total graded credits at the 400 or 500 level* Minimum of <u>9</u> graded credits with Biol prefix* <u>A breadth requirement which</u> includes 6 credits outside the student's main area of study* <u>Substitution of a course on</u> teaching (initially to be taught as <u>Biol 589, a but a new course</u> proposal will be forthcoming) for new students in the program (substituting for UNIV 590)* <u>Addition of a course on research</u> proposal design and grant writing	8-12

			1 credit of exit seminar (Biol 500; ungraded) Transfer credits follow graduate school requirements (up to 50% of graded credits)	(currently Biol 589)* 2 additional credits of special topics (Biol 589; included in the 21 graded credit minimum, but excluding the teaching and research proposal courses) 2 credits of proposal defense (Biol 501; ungraded) 1 credit of exit seminar (Biol 500; ungraded) Transfer credits follow graduate school requirements (up to 50% of graded credits)	
BSysE	597	New	N/A	<b>Biomass Biological Process</b> <b>Engineering</b> 3 Prereq BSysE 594. Technical issues in the biological process engineering field, commercial application and evaluation of new technologies in resource, environment and economic contexts.	1-12
Revise of major requirements in MS in Civil & Environmental Engineering, Non-Thesis option	N/A	Revise	Project Option: Minimum of 30 credits as follows: - 24 credits of graded graduate coursework - 2 credits of graded seminar (CE 580) - 4 credits for CE 702 (project & exam) Courses Option: Minimum of 30 credits as follows: - 27 credits of graded graduate coursework - 1 credit of graded seminar (CE 580) - 2 credits for CE 702 (exam)	Project Option: Minimum of 30 credits as follows: - 24 credits of graded graduate coursework - <u>1</u> credit of graded seminar (CE 580) - 4 credits for CE 702 (project & exam) Courses Option: Minimum of 30 credits as follows: - 27 credits of graded graduate coursework - 1 credit of graded seminar (CE 580) - 2 credits for CE 702 (exam)	8-11
Crop_Sci	546	New	N/A	<b>Plant Breeding</b> 3 Prereq MBioS 301 Application of genetic principles to improvement of crop plants. Cooperative course taught by UI, open to WSU students (PISc 546).	1-12
Crop_Sci	547	New	N/A	<b>Biometrics for Plant Scientists</b> 3 Use of biometrical techniques in research with particular emphasis on designing, analyzing, and interpreting agricultural and biological experiments; application of	1-12

				statistical methods to biological experiments and problems that may be encountered when applying these techniques to biological systems. Cooperative course taught by UI, open to WSU students (PISc 547).	
ME	526	New	N/A	<b>Statistical Thermodynamics</b> 3 Microscopic development of equilibrium; classical and quantum particle statistics; statistical description of real and ideal gases, solids, and liquids. Cooperative course taught jointly by WSU and UI (ME 526).	1-12
Pl P	501	New	N/A	<b>Biology and Control of Plant</b> <b>Diseases</b> 3 (2-3) Introduction to the biology and control of plant diseases covering disorders caused by fungi, viruses, bacteria, and nematodes.	
Pl P	526	Revise	Advanced Fungal Biology 4 (2-6) Prereq Pl P 421, 521 and graduate standing. Advanced topics in fungal biology, ecology, systematics, evolution and coevolution via discussions of literature and special laboratory projects.	Advanced Fungal Biology 4 (2- 6) Prereq Pl P 521; graduate standing. Advanced topics in fungal biology, ecology, systematics, evolution and coevolution via discussions of literature and special laboratory projects. <u>Cooperative course</u> taught by WSU, open to UI students (PlSc 526).	1-12
Soil_Sci	531	New	N/A	<b>Soil Microbiology</b> 3 (2-3) Biology and significance of organisms inhabiting soil and their role in nutrient cycling, ecosystem function, agriculture, and bioremediation. Cooperative course taught by WSU, open to UI students (SOIL 531).	1-11