

Advising Checklist for the B.S. Degree in Microbiology
Updated for 2016-17

- All required science courses (BB, BI, CH, MB, MTH, PH, ST) must be taken for a grade (no S/U grading).
- Microbiology majors must have a minimum of 36 credits in upper division microbiology with a 2.0 minimum grade point average.
- 22 credits of 400-level microbiology are required; 2 credits must come from a 400-level MB laboratory class and 2 credits from MB 490.
- BOT 350 (Introduction to Plant Pathology) and BOT 461 (Mycology) count as 400-level microbiology courses.
- MB 401 (Research), MB 403 (Thesis), MB 405 (Reading & Conference) or MB 410 (Internship) cannot account for more than 3 of the 22 required 400-level credit hours. Teaching Assistant (MB 406) credit can account for an additional 3 credits of 400-level hours as well. Any additional hours in these areas will count as elective credit. Graduate level (500/600) courses may be taken as MB 499 with the instructor's approval.

		FALL	WINTER	SPRING
Freshman	Mathematics	<input type="checkbox"/> MTH 251 (4cr) F/W/Sp/Su	<input type="checkbox"/> MTH 252 (4cr) F/W/Sp/Su or MTH 268 (4cr) Sp	
	General Chemistry	<input type="checkbox"/> CH 231/261 (4+1cr) F/W/Su	<input type="checkbox"/> CH 232/262 (4+1cr)W/Sp/Su	<input type="checkbox"/> CH 233/263 (4+1cr)Sp/Su
	Biology & Microbiology	<input type="checkbox"/> BI 211 (4cr) F/Su <input type="checkbox"/> MB 110 (1cr) F	<input type="checkbox"/> BI 212 (4cr) W/Su	<input type="checkbox"/> BI 213 (4cr) Sp/Su
	Bacc Core Courses	<input type="checkbox"/> WR 121 (3cr) alpha-listed ¹ <input type="checkbox"/> COMM 111/114/211/218 (3cr)	<input type="checkbox"/> HHS 231 (2cr) <input type="checkbox"/> HHS/MS/PAC lab (1cr)	
Sophomore	Organic Chemistry	<input type="checkbox"/> CH 331 (4cr) F/W/Su	<input type="checkbox"/> CH 332 (4cr) W/Sp/Su	<input type="checkbox"/> CH 337 (4cr) F/Sp/Su
	Statistics, Biology, & Microbiology	<input type="checkbox"/> ST 351 (4cr) F/W/Sp/Su	<input type="checkbox"/> BI 314 (4cr) F/W/Sp/Su	<input type="checkbox"/> MB 302 (3cr) F/W/Sp/Su <input type="checkbox"/> MB 303 (2cr) F/W/Sp/Su
	Physics (can be taken junior year if math courses are not complete)	<input type="checkbox"/> PH 201 (5cr) F/Su	<input type="checkbox"/> PH 202 (5cr) W/Su	<input type="checkbox"/> PH 203 (5cr) Sp/Su
Junior	Biochemistry & Chemistry	<input type="checkbox"/> BB 450 (4cr) F/W/Su	<input type="checkbox"/> BB 451 (3cr) W/Sp/Su	<input type="checkbox"/> CH 324 ² (4cr) F/W/Sp/Su
	Microbiology		<input type="checkbox"/> MB 310 (3cr) Bacterial Molecular Genetics <input type="checkbox"/> MB 311 (3cr) W/Sp Molecular Microbiology Lab	<input type="checkbox"/> MB 312 (3cr) Bacterial Physiology ...
Senior	Required	<input type="checkbox"/> MB 490 (2cr) F/W Microbiology Capstone		
	18 credits 400-level MB Lectures: (can include courses listed in the two sections below)	<input type="checkbox"/> MB 416 (3cr) Immunology <input type="checkbox"/> MB 420 (3cr) Microbial ... Diversity <input type="checkbox"/> BOT 350 (4cr) Plant Pathology <input type="checkbox"/> BOT 461 (5cr) Mycology	<input type="checkbox"/> MB 440 (3cr) Food Microbiology <input type="checkbox"/> MB 448 (3cr) Microbial Ecology <input type="checkbox"/> MB 456 (3cr) Microbial ... Biotechnology <input type="checkbox"/> MB 480 ³ (3cr) General Parasitology	<input type="checkbox"/> MB 430 (3cr) Bacterial Pathogenesis <input type="checkbox"/> MB 434 (3cr) Virology <input type="checkbox"/> MB 436 (3cr) Human Microbiome <input type="checkbox"/> MB 479 (3cr) Fermentation Microbiology <input type="checkbox"/> MB 491 ⁴ (3cr) Fish Diseases...
	2 credits 400-level MB Lab:	<input type="checkbox"/> MB 417 (2cr) Immunology Lab	<input type="checkbox"/> MB 441 (2cr) Food Microbiology Lab	<input type="checkbox"/> MB 435 (2cr) Pathogenic Microbes Lab <input type="checkbox"/> MB 496 ⁴ (2cr) Fish Diseases... Lab
	400-level Special Projects:	<input type="checkbox"/> MB 401/403/405/410 (see above for descriptions) (1-3cr) F/W/Sp/Su <input type="checkbox"/> MB 406 Teaching Assistant (1-3cr) F/W/Sp/Su 3 credits of 406 and 3 credits of 401/403/405/410 can be applied to the 18 credits of 400-level MB lecture credit requirement. Additional credits in these areas will count as elective credit.		
Any Year				

¹ WR 121: Fall (A-G) Winter (H-N) Spring (O-Z)

² CH 324 is a departmental requirement; CH 390 is not an acceptable substitution. To earn the chemistry minor, CH 324 must be taken for a letter grade. If a student is only earning the microbiology major (no chemistry minor), CH 324 may be taken S/U.

³ MB 480 is taught on-campus during odd years (e.g. winter 2015, 2017, 2019) and as an Ecampus course during even years (e.g. winter 2014, 2016, 2018).

⁴ MB 491/496 is only taught even years (e.g. spring 2016, spring 2018).

Advising Checklist for Oregon State University Baccalaureate Core Requirements

Students must complete 180 hours to graduate. Fulfilling the bacc core and MB requirements adds up to ~150 credits.

Skills

<input type="checkbox"/>	Fitness	3cr	Must take lecture (2 cr <input type="checkbox"/>) and lab (1 cr <input type="checkbox"/> Lecture: HHS 231; Labs: 241, 242, 243, 244, 245, 246, 247, 248; MS 130; or any PAC course
	Mathematics¹	4cr	Part of major requirements
<input type="checkbox"/>	Writing I²	3cr	WR 121
<input type="checkbox"/>	Writing II³	3cr	HC 199; PHL 121; WR 201, 214, 222, 224, 241, 303, 323, 324, 327, 330, 341, 362
<input type="checkbox"/>	Speech¹	3cr	COMM 111, 114, 211, 218

Writing Intensive Course (part of major requirements)

WIC	3cr	MB 311
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Perspectives: no more than 2 classes from the same department

	Biological Sciences	4cr	Part of major requirements
	Physical Science	4cr	Part of major requirements
	One additional course in biological or physical science	4cr	Part of major requirements
<input type="checkbox"/>	Cultural Diversity (CD)	3cr	ANTH 209, 210, 311, 313, 314 315, 316, 317, 318, 319, 447; ART 208, 310, 311, 312, 313; CHN 331, 332, 333; ENG 210, 211, 212, 213, 360; ES 101, 231, 241, 243; FR 329; GEO 105, 325, 327, 328; HEBR 231; HST 104, 105, 106, 215, 320, 324, 350, 351, 352, 353, 381, 382, 387, 388, 391, 392, 396, 397, 485; JPN 331, 332, 333; LING 209; MUS 108; NUTR 216; PHL 160, 213, 214, 312, 315, 371; PS 343, 344, 346, 348, 350; QS 462; REL 160, 213, 214, 215, 312, 315, 324, 350, 371, 387, 388, 485; RUS 231, 232, 233; SPAN 237; WGSS 235, 280
<input type="checkbox"/>	Literature and the Arts (LA)	3cr	ART 101, 204, 205, 206, 208, 210, 264, 310, 311, 312, 313, 320, 321, 322, 323, 352, 364, 365; ENG 104, 105, 106, 107, 201, 202, 204, 205, 206, 207, 208, 210, 211, 212, 213, 214, 215, 221, 253, 254, 260, 275, 295, 317, 318, 319, 320, 321, 322, 330, 362, 374; ENG 352; ES 334; FILM 110, 125, 245, 255, 256, 265; GER 261; IT 261; MUS 101, 102, 103; PHL 295; RUS 232; SPAN 236, 361; TA 147, 330, 331, 332; WGSS 295
<input type="checkbox"/>	Social Processes and Institutions (SPI)	3cr	AEC 250; AG 351; ANTH 101, 110; ECON 201, 202; GEO 204, 205; GEOG 103, 240, 250, 252; H 210, 225, 333; HDFS 201, 240; HST 101, 102, 103; KIN 312; NMC 100; PS 201, 204, 205, 315, 331, 374; PSY 201, 202; QS 321; SOC 204, 205; WGSS 223, 224, 240, 321; WLC 101; WSE 266
<input type="checkbox"/>	Western Culture (WC)	3cr	AEC 240, 253; ANTH 208, 261, 312; AREC 240, 253; ART 204, 205, 206, 210, 321, 322, 323; CROP 340; ENG 201, 202, 204, 205, 206, 207, 208, 214, 215, 253, 254, 275, 317, 318, 319; FCSJ 261; FILM 110, 125; FR 270, 332, 333, 429; FST 260, 273; GEO 106, 326, 329; GEOG 106; GER 231, 241, 331, 332; HST 101, 102, 103, 104, 105, 106, 201, 202, 203, 338; IT 331; KIN 312; LING 208; PHL 150, 170, 201, 205, 206, 207, 220, 251, 301, 302, 303, 360, 365; PS 206, 349; REL 170, 206, 220; RUS 231, 232, 233; SPAN 331, 332, 336, 337, 338, 361; WSE 266

Difference, Power, and Discrimination

<input type="checkbox"/>	Difference, Power, and Discrimination (DPD)	3cr	AG 301; ANTH 159, 251, 345, 361; ART 432; CS 175; DHE 270; ECON 383; ED 216; ENG 220, 260, 420; ES 159, 201, 212, 213, 221, 223, 233, 243, 334, 351, 353, 355, 357, 375, 431, 437, 452, 453, 457; FCSJ 361; FILM 220; FW 340; GE 309; GEOG 203; H 465; HDFS 201; HST 201, 202, 203, 210, 365, 368, 369, 370; KIN 475; LING 251; MB 330; PHL 210, 280, 345; PS 110, 322, 325, 363, 375, 425; PSY 426, 466; QS 262, 364, 375, 431, 432; SOC 206, 312, 360, 426; SPAN 470; TA 360; TCE 216; WGSS 223, 224, 230, 262, 325, 364, 375, 414, 431, 432, 462, 466; WLC 159
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Synthesis (upper division): must be taken from different departments

<input type="checkbox"/>	Contemporary Global Issues (CGI)	3cr	AEC 351, 352; AG 351; AMS 350; ANTH 352, 374, 380, 383, 466, 473, 478, 482, 484, 488; BA 465; BI 301, 306; COMM 446; CROP 330; DHE 475; ECON 352; ENG 416, 457, 458, 497; ENT 331; FCSJ 454; FE 456; FES 365; FOR 465; FW 325; GEO 300, 304, 308, 330, 350; GEOG 300, 330; H 312; HDFS 447; HORT 331; HST 317, 385, 386, 390, 425, 465, 485, 488; PHL 310, 344, 432, 433, 440, 443; PS 341, 345, 354, 455, 458; QS 476; REL 310, 344, 425, 432, 433, 434, 443, 485; SOC 454, 480; SUS 350; TOL 479; WGSS 350, 360, 380, 463, 476, 480, 495; WSE 470; Z 349
<input type="checkbox"/>	Science, Technology & Society (STS)	3cr	AEC 353; AGRI 411; ANS 315, 485; ANTH 330, 372, 432, 481; ART 367; ATS 320; BB 331, 332; BI 300, 345, 348, 420, 435; BOT 324; CH 374; CS 391; DHE 415, 462; EAH 411; ENGR 350, 363; ENSC 479; ENT 300; ES 445; FES 435, 477, 485; FST 421; FW 350, 356, 360, 470, 485; GEO 300, 305, 306, 307, 335, 352, 380, 449; GEOG 300, 340; H 445; HEST 310; HORT 330; HST 416, 481; HSTS 411, 412, 413, 414, 415, 416, 417, 418, 419, 421, 422, 423, 425, 440, 451, 470; IE 380; NE 319; NMC 427; NR 351, 477; NSE 319; NUTR 312; PH 313, 331, 332; PHL 325, 444; PPOL 441; PS 370, 476; RNG 477; SOC 456, 481, 485; SOIL 335, 395; SUS 304; TOX 360, 435; WGSS 320, 340, 440; WSE 392, 415

¹ – Speech course and Math 111 or above must be satisfactorily completed within the first 45 hours of OSU coursework.

² – WR I (WR 121) must be completed with at least a C- grade within the first 45 hours of OSU coursework.

³ – WR II must be satisfactorily completed within the first 90 hours of OSU coursework.