

# Fundamentals of Ecology (BIO/ESS 148) :: Schedule, Spring 2022

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***Please note that the schedule is subject to change at any time. Check back frequently for updates!***

M = Monday

W = Wednesday

L = Lecture

D = Discussion

Date	Lect/Disc_#	Lecture_Topic	Description	Required Readings
<b>1/19</b>	<b>W-L1</b>	Introduction	Levels of organization	Bowman Ch. 1
		Disc –	<b>No Discussion Section</b>	
<b>1/24</b>	<b>M-L2</b>	Scales	Scales, models, and R; Intro to R	Leopold; excerpts
<b>1/26</b>	<b>W-L3</b>	Biomes	Distinguishing among Earth's biomes	Bowman Ch. 3
	<b>D1</b>	Disc 1	Investigating ecological problems with R	What does ecology have to do with R
<b>1/31</b>	<b>M-L4</b>	Energy 1	Variation in temperature and water	Bowman Ch. 4
<b>2/2</b>	<b>W-L5</b>	Energy 2	Energetic pathways in ecology	Bowman Ch. 5

Date	Lect/Disc_#	Lecture_Topic	Description	Required Readings
	<b>D2</b>	Disc 2	Temperature as an ecological constraint	Gunderson & Leal 2015
<b>2/7</b>	<b>M-L6</b>	Allometry 1	Allometry & Macroecology 1	West & Brown
<b>2/9</b>	<b>W-L7</b>	Allometry 2	Allometry & Macroecology 2	
	<b>D3</b>	Disc 3	Allometry and metabolic scaling	
<b>2/14</b>	<b>M-L8</b>	Evolution 1	Ecology as the driver of natural selection	Bowman Ch. 6
<b>2/16</b>	<b>W D4</b>	<b>Exam I</b> Disc 4	Evolution by Natural Selection	
<b>2/21</b>	<b>M</b>		<b>President's Day – No Class</b>	
<b>2/23</b>	<b>W-L9</b>	Evolution 2 Disc –	Evolutionary change <b>No Discussion Section</b>	Bowman Ch. 6
<b>2/28</b>	<b>M-L10</b>	Life History	Life history diversity & tradeoffs	
<b>3/2</b>	<b>W-L11</b>	Behavior	Behavioral ecology	Bowman Ch. 8, Sinervo
	<b>D5</b>	Disc 5	Life Histories	

Date	Lect/Disc_#	Lecture_Topic	Description	Required Readings
3/7	M-L12	Populations 1	Density dependence and population dynamics	Bowman Ch. 10
3/9	W-L13	Populations 2	Logistic Growth & Discrete dynamics	
	D6	Disc 6	Exponential and Logistic Growth{:target="_blank"}	
3/14	M-L14	Competition	Intro to competition	Bowman Ch. 14
3/16	W D7	<i>Exam II</i> Disc 7	Exponential and Logistic Growth 2{:target="_blank"}	
3/21	M		<i>Spring Break – No Class</i>	
3/23	W		<i>Spring Break – No Class</i>	
3/28	M-L15	Competition 2	Competition dynamics 1	
3/30	W-L16	Competition 3	Competition dynamics 2	
	D8	Disc 8	Lotka-Volterra competition dynam-ics{:target="_blank"}	
4/4	M-L17	Predation 1	Herbivory and Predation	Bowman Ch. 12
4/6	W-L18	Predation 2	Predation dynamics	

Date	Lect/Disc_#	Lecture_Topic	Description	Required Readings
	<b>D9</b>	Disc 9	Lotka-Volterra predation dynamics{:target="_blank"}	
4/11	<b>M-L19</b>	Disease	The dynamics of disease	Bowman 13.4-end, Blackwood to 2.2.2, R0 is just an average
4/13	<b>W-L20</b> <b>D10</b>	No class Disc 10	Dynamics of disease{:target="_blank"}	
4/18	<b>M-L21</b>	Parasitism	Parasites and parasitoids	Bowman Chap. 13
4/20	<b>W</b> <b>D11</b>	<b>Exam III</b> Disc –	None	
4/25	<b>M-L22</b>	Interactions 1	Mutualisms	Bowman Chap. 15
4/27	<b>W-L23</b> <b>D12</b>	Interactions 2 Disc 11	Food webs Species interaction net-works{:target="_blank"}	Bowman Chap. 21
5/2	<b>M-L24</b>	Communities 1	Island biogeography	Bowman Chap. 18.3
5/4	<b>W-L25</b> <b>D13</b>	Communities 2 Disc 12	Ecological communities Island biogeography{:target="_blank"}	Bowman Chap. 16.2-16.3
5/7	<b>Sat</b>	<b>FINAL EXAM</b>	Comprehensive (11:30-2:30 PM)	