

# Healthy Spaces: *Medical Geography of Green & Blue Spaces*



**GEOG 394-02**

**FALL 2018**

**1:10-2:10pm MWF**

**Carnegie 105**

**Prof. Kelsey McDonald, PhD**

**Office Hours:** Mon 2:30-4pm;

Wed 11am-12pm; or by appt.

**Email:** [kmcdonal@macalester.edu](mailto:kmcdonal@macalester.edu)

**Office:** CARN 110; 651-696-6327

## **Course Description:**

This course examines the connections between human health and exposure to green and blue spaces. Does time spent in natural spaces reduce stress and anxiety, and improve physical health? Or conversely might exposure to blue and/or green spaces have a detrimental effect on health?

After building an understanding of related theories through scholarly readings and in-class discussions, we will examine these questions from quantitative and qualitative perspectives. We will identify methodological challenges, such as how to measure exposure to these spaces. We will explore questions of equity in access to healthy spaces, and consider non-urban spaces as well. Research and writing assignments will expand our understanding of the current body of evidence.

A class field trip will help place this area of research in context, and individual experiences in blue and green spaces will provide opportunities for personal reflections and the observation of others in these “healthy spaces.”

*Community & Global Health Concentration elective.*

*No prerequisites.*

**Specific Course Learning Objectives:**

- 1) Build knowledge of theoretical underpinnings of green/blue space research in and beyond geography.
- 2) Understand variability in how green and blue space exposures are assessed, be able to critique specific assessments in particular studies.
- 3) Understand different types of studies (experiment, cohort, cross-sectional) and the level of evidence each provides.
- 4) Understand common challenges to assessing the relationship between green/blue spaces and health outcomes/conditions (e.g. confounding, bias).
- 5) Effectively assess current state of research on the potential relationship between green/blue space and at least one health outcome/condition.
- 6) Examine several current challenges within green/blue space research (e.g. environmental gentrification).
- 7) Develop an understanding of your own personal relationship with green and blue spaces through reflections while in these settings.

**Course Assignments:**

• Participation (incl. reading and green/blue space reflections)	30%
• Midterm #1 – Integration of green/blue space reflections + theory	20%
• Midterm #2 – Health outcome research paper + presentation	20%
• Final Project – Research paper (or other project as approved by Prof. McDonald) + presentation	30%
<b>TOTAL</b>	<b>100%</b>

**Course Grading:**

Letter grades will be assigned as follows:

A	≥ 94 %	Outstanding relative to level necessary to meet course objectives/requirements
A-	90 – 93.9 %	
B+	87 – 89.9 %	
B	83 – 86.9 %	Significantly above level necessary to meet course objectives/requirements
B-	80 – 82.9 %	
C+	77 – 79.9 %	
C	73 – 76.9 %	Meets course objectives/requirements in every respect
C-	70 – 72.9 %	
D+	67 – 69.9 %	Worthy of credit but fails to fully meet course objectives/requirements
D	63 – 66.9 %	
D-	60 – 62.9 %	
F	< 60 %	No credit – work was either 1) complete but at level not worthy of credit, or 2) not complete and no agreement was reached between professor and student for an official Incomplete.
I	The policy for incompletes is in accordance with that of the college: <a href="http://www.macalester.edu/academicprograms/academicpolicies/grading/">http://www.macalester.edu/academicprograms/academicpolicies/grading/</a>	

**Required Materials:**

A paper journal/notebook exclusively for reflections in your green and blue spaces, which will be turned in to Prof. McDonald at several points in the semester.

**Required Readings:**

All readings for this course will be available on Moodle (unless otherwise stated).

**Course Website:**

Login at <http://moodle.macalester.edu/>

The course website is a source of *the most up-to-date information* for the class and includes readings, assignments, and other information.

**Tentative Course Schedule:** subject to change, with fair warning. Check Moodle regularly!

Week	Date	Class Topic	Readings for Today (see Moodle for specific pages)	Major Assignment Due
1	9/5	COURSE INTRO		
	9/7	THEORETICAL FOUNDATION: Attention restoration (ART)	1) Kaplan & Kaplan 1989.	
2	9/10	THEORETICAL FOUNDATION: Stress recovery (SRT); ART + SRT	1) Ulrich et al 1991. 2) Kaplan 1995.	
	9/12	THEORETICAL FOUNDATION: Social cohesion/support	1) Berkman et al 2000. 2) Maas et al 2009.	
	9/14	YOUR GREEN/BLUE SPACES: Discussion		<b>DUE: Description of green/blue spaces to study</b>
3	9/17	THEORETICAL FOUNDATION: Therapeutic landscapes	1) Williams 1999. <i>Additional resources: Gesler 1992. Bell et al 2018.</i>	
	9/19	THEORETICAL FOUNDATION: Therapeutic landscapes	1) Conradson 2005. 2) Wakefield & McMullen.	
	9/21	GREEN SPACE EXPERIENCES: 'forest bathing' example	1) Tsunetsugu et al 2010 <i>Optional: Kalaichandran July 2018 (NYTimes). Wall Kimmerer 2014.</i>	
	<b>9/22</b>	<b>FIELD TRIP (Saturday)</b>		
4	9/24	POST-FIELD TRIP: Discussion		
	9/26	THEORETICAL FOUNDATION: Physical activity	1) Coombes et al 2010	

	9/28	ASSESSING GREEN SPACE	1) Gascon et al 2015. 2) Cusack et al 2017. 3A) Amoly et al 2014. 3B) Supplemental material for Amoly et al 2014.	
5	10/1	ASSESSING GREEN SPACE	<i>Neighbourhood Green Space Tool (NGST)</i> 1) Gidlow et al 2012. 2) NGST User Guide. 3) NGST Tool.	<b>DUE: Use NGST to assess your green space</b>
	10/3	ASSESSING GREEN SPACE	1) Almanza et al 2012. 2) Li et al 2015.	
	10/5	ASSESSING BLUE SPACE	1) Gascon et al 2017. 2) White et al 2013. 3) Bell et al 2015.	
6	10/8	ASSESSING BLUE SPACE	<i>Review Bell et al 2015, "Seeking Everyday Wellbeing" from last class.</i>	
	10/10	DISCUSS REFLECTIONS ON YOUR GREEN & BLUE SPACES		<b>DUE: MIDTERM #1</b>
	10/12	QUANTITATIVE STUDIES: Study designs	1) EXPERIMENT: Tyrvaiven et al 2014. 2) NATURAL/QUASI-EXPERIMENT: Ulrich 1984.	
7	10/15	QUANTITATIVE STUDIES: Study designs	3) LONGITUDINAL STUDY: Alcock Et al 2014. 4) CROSS-SECTIONAL STUDY: Triguero-Mas et al 2015.	
	10/17	QUANTITATIVE STUDIES: Confounders; Mediators; Modifiers	1) Triguero-Mas et al 2015.	
	10/19	QUANTITATIVE STUDIES: Interpreting results	1) Mitchell 2013. 2) Markevych et al 2014. 3) Beyer et al 2014.	
8	10/22	QUALITATIVE STUDIES	1) Thomas 2015.	
	10/24	QUALITATIVE STUDIES	1) Bell et al 2015.	
		<i>FALL BREAK 10/25-10/28</i>		
9	10/29	CATCH UP & RECAP		
	10/31	STUDENT PRESENTATIONS/ DISCUSSIONS (MIDTERM #2)		<b>DUE: MIDTERM #2 PROJECT/REPORT</b>
	11/2	STUDENT PRESENTATIONS/ DISCUSSIONS (MIDTERM #2)		

10	11/5	GUEST LECTURE: Prof. Eric Carter	1) Carter 2015.	
	11/7	ADVERSE EFFECTS	1) Lohmus & Balbus 2015. 2) Dadvand et al 2014.	
	11/9	ADVERSE EFFECTS	1) Collins & Kearns 2007. 2) Milligan & Bingley 2007.	
11	11/12	EQUITY, ENVIRONMENTAL GENTRIFICATION, 'JUST GREEN ENOUGH'	1) Li et al 2016. 2) Wolch et al 2014. <i>Optional: Checker 2011.</i>	
	11/14	EQUITY, ENVIRONMENTAL GENTRIFICATION, 'JUST GREEN ENOUGH'	3) Byrne & Wolch 2009.	
	11/15	<i>FYI: Florence Williams, author of "The Nature Fix", Mpls Parks Foundation "Next Generation of Parks" speaker (details TBD).</i>		
	11/16	SPECIFIC POPULATIONS: Children	1) Amoly et al 2014. 2) Milligan & Bingley 2007.	
12	11/19	SPECIFIC POPULATIONS: Elderly <i>Tentative: Guest Lecture, Jessica Finlay PhD</i>	1) Finlay et al 2015.	
		<b>THANKSGIVING BREAK 11/21-11/25</b>		
13	11/26	SPECIFIC POPULATIONS: Women, homelessness	1) Richardson & Mitchell 2010. 2) Plane & Klodawsky 2013.	
	11/28	RURAL/NATIONAL PARK SETTINGS	1) Conradson 2005. 2) The National Parks and Public Health: A NPS Healthy Parks, Healthy People Science Plan 2013.	
	11/30	NEW/COMPLEMENTARY AREAS OF STUDY	1) Rook 2013. 2) Kuehn et al 2017.	
14	12/3	CATCH UP & RECAP	1) James et al 2015.	
	12/5	FINAL PRESENTATION PREP; COURSE EVALUATIONS		
	12/7	STUDENT PRESENTATIONS/ DISCUSSIONS		
15	12/10	STUDENT PRESENTATIONS/ DISCUSSIONS		
	12/12	STUDENT PRESENTATIONS/ DISCUSSIONS		<b>DUE: FINAL PROJECT/PAPER</b>

**Succeeding in This Course:**

To maximize your success in this class, please:

- **Prepare** – Come to class prepared to discuss the assigned readings and any related reflections or assignments.
- **Participate** – Active participation will significantly enhance your achievement of the learning objectives. Those who consistently attend class, arrive prepared (see above), and participate in discussions will earn high grades for participation.
- **Support** – Help create a supportive and respectful learning environment. Encourage everyone’s participation in discussions. Refrain from any unnecessary distractions in the classroom (e.g. using digital devices during class for non-class related activities).
- **Stay on Track** – Late assignments or exams will not be accepted.
  - Exceptions may be made for extraordinary circumstances, but only if approved *before* the due date.
- **Consult** – If you are having difficulties or would like to discuss anything further, Professor McDonald is available to help.
- **Relax** – The classroom is a place to learn, develop, and discuss new ideas.

**Academic Integrity Policy:**

Academic dishonesty will not be tolerated. Acts of academic dishonesty include, but are not limited to, plagiarism, fabrication of data, cheating, stealing or buying copies of exams or papers, unauthorized collaboration, and taking exams for someone else. Be aware that at Macalester penalties for academic dishonesty include verbal reprimand, written reprimand, lowering of grade on a specific exam or assignment, a failing grade on specific exam or assignment, lowering of course grade, a failing course grade, suspension from the college, and expulsion from the college. For more details, see the college's information on Academic Integrity at:

<http://www.macalester.edu/academicprograms/academicpolicies/academicintegrity/>

**Accommodations:**

In some circumstances, course design may pose barriers to a student’s ability to access or demonstrate mastery of course content. Reasonable accommodations are available for students with documented disabilities. If you think you need an accommodation, please contact the Office of Student Affairs early in the semester. The Assistant Dean of Students coordinates services for any student in need of accommodations. You may schedule an appointment by contacting the Office of Student Affairs, 119 Weyerhaeuser, 651-696-6220.

