Who am I?	Dr. Daniel M. Fernandez
Where am I?	Chapman Building 53, Room S309 (near top of stairs)
How can you reach me?	phone: (831) 582-3786, email: <u>dfernandez@csumb.edu</u>
When are my office hours?	M, T, Th 10 AM – 10:45AM, or by appointment. I occasionally have meetings that get scheduled during my office hours. When I do have conflicts with my office hours, I will let you know. Students with disabilities who may need accommodations please see me
What if I need special accommodations?	by February 4, 2019 during office hours or make an appointment to see me (my email and phone number are given above). Also, contact: Student_Disability_Resources@csumb.edu Building 47, Student Services, First Floor Phone: 831/582-3672 voice, or 582-4024 fax/TTY
	http://sdr.csumb.edu/
Remind me, please, when does class meet?	Wednesdays and Fridays from 12:00-1:50 PM
Where does class meet?	Valley Hall (Bldg. 82), Room B115
How do I teach?	This class will consist of readings, panel presentations, class discussions and reflections/write-ups on each panel. There is also a semester-long project. I encourage full participation.
Where can I find the course materials?	All materials can be found on the class Ilearn site.

Spring 2019 ENSTU 376 Syllabus CRN 22985

	ENSTU 376, Infrastructure Systems	
What does this course cover?	This course provides a basic overview of the history and present state of each of our utilities and of our building, transportation and agricultural infrastructure. Practical and ideal future scenarios as well as the integrative relationships between and among different utility systems are examined. Students will learn how our current infrastructure came about and consider what it would take to make improvements to it in a tractable manner.	
Who should take it?	This class is intended for students majoring or minoring in Environmental Studies, but it is open to any student interested in exploring areas related to the basic infrastructure that we all rely upon.	
Required Text	<i>On the Grid</i> by Scott Huler, 2010 ISBN: 13 978-1-60529-647-0	
Prerequisites	GE areas B1-B3 and A1-A3 plus either STAT 100 or MATH 130	
Is there anything special about this semester's class?		

This semester the class will be working on projects related to the sustainability needs of the City of Seaside. Details will be forthcoming

Class Learning Outcomes:

Since this is an outcomes-based university, this course has been partitioned into a number of outcomes (listed below) that will be assessed through regular online quizzes/chapter reflections, class participation, and write-ups on regular panel presentations on each of the topics presented.

1) Name and describe some essential components associated with each infrastructural area presented in the readings and in the panel presentations.

2) Consider means to critically evaluate the intention and effectiveness of each infrastructural area presented.

3) Determine relationships and interactions that exist between the various infrastructure systems described, both those that are mutually supportive and those that are competitive.

- 4) Describe possible future scenarios that address the implementation of each of these infrastructures.
- 5) Propose suggestions based upon information gleaned through speakers and readings on means that systems can be changed for the better, particularly with consideration of how they interact with one another.
- 6) Participate in the construction, deployment and monitoring of standard fog collection equipment for watering planted oak trees on campus.

Assessment Format:

Overall performance will be assessed based upon:

Online assignments for each chapter: 20% class participation: 10% panel write-ups: 40% Transportation journal: 10% Final Project: 20%

> A-range is 90-100% B-range is 80-89.99% C-range is 70-79.99% D-range is 60-69.99% F-range is below 60%

-Class participation involves coming to class and engaging in the activities that occur during that time.

-The online assignments typically consist of answering questions associated with either the text book or other readings as assigned

-I will measure participation based on feedback submitted at the conclusion of each class.

-Panel write ups are normally submitted weekly and the requirements for those are given below.

-The transportation journal involves you taking some form of non-single driver automobile transportation at least 10 times over the course of the semester. You will record your experience on a Google Sheet that will be set up for you. Any bus trips work as do train, bicycle, scooter, or walking to get from one location to another that you may otherwise consider driving to. You can also count carpooling.

Bonus Activities:

There will be several opportunities for bonus points during the semester, typically in the form of attending an event relevant to the course. I will notify you of such events. With a short writeup you will earn several bonus points which will be added to your homework total for each activity in which you participate.

Academic Integrity

Academic Integrity is of central importance at CSUMB. The core of this integrity resides in the scholastic honesty of the CSUMB community, and therefore, is the responsibility of all students and faculty to uphold and maintain. Forms of academic dishonesty include: cheating, fabrication, plagiarism, and collusion in any of these activities. We value informal resolution of academic integrity allegations; however, students discovered to have engaged in academic dishonesty will be sanctioned.

For more information regarding the Academic Integrity Policy, please go to: <u>http://policy.csumb.edu/site/x20830.xml</u>.

Sexual Misconduct, Dating and Domestic Violence, and Stalking

CSUMB is committed to creating and sustaining an environment free of sexual misconduct, dating and domestic violence, and stalking. If you experience any of these forms of misconduct, CSUMB encourages you to utilize the resources described below.

To report any type of misconduct: **University Police Department** Emergencies: 911 Non-emergencies: 831-655-0268

Title IX: Discrimination, Harassment, and Retaliation Office Call: 831-582-3510 Email: wensmith@csumb.edu Email is recommended for fastest response

For confidential support:

Campus Advocate/Monterey County Rape Crisis Center Call or text: 831-402-9477 24 hour crisis line: 831-375-4357 **Personal Growth and Counseling Center (PGCC)** Call: 831-582-3969

Any CSUMB staff or faculty member other than the campus advocate or PGCC counselors who are told about student experiences of misconduct must report information to the Title IX office. <u>Only PGCC and campus advocate staff can keep such information confidential.</u>

Class Preparation

Please read the associated chapter and do the chapter assignment PRIOR to the related class or panel presentation (in other words, by Wednesday at noon). Panel writeups will always be due by the Monday evening AFTER the panel, but I suggest completing them immediately after each panel.

Week	Planned topic, activity, and panel	Associated reading and Questions on Ilearn
Jan. 21-25	Introduction, Chapter 1 discussion	Introduction and Chapter 1
		Do questions by Friday, Jan
	Surveying, GPS, GIS,	25 before noon.
	Geodesy Panel on Friday, January 25 <mark>.</mark>	
Jan. 28- Feb. 1	Stormwater Management,	Chapter 2 by Wednesday,
	Soil Panel, Fri., February 1.	by Wednesday, Jan. 30
		before noon
Feb. 4-8	Potable Water	Chapter 3
	Conveyance, Use and	by Wednesday, Feb. 6
	Treatment Panel on Fri., February 8.	before noon
Feb. 11-15	Wastewater Treatment	Chapter 4
	Panel on Fri., February 15.	by Wednesday, Feb. 13 before noon
Feb. 18-22	Transportation Panel 1:	Chapter 5 by Wednesday,
	Roads, Bridges, Sidewalks,	Feb. 20
	Bridges, and Overpasses	before noon
	Panel, Wed. February 20	

Feb. 25-March 1	Electricity and Cas Danal	Chanter (by Wednesday
Feb. 25-March 1	Electricity and Gas Panel,	Chapter 6 by Wednesday, Feb. 27
	Fri., March 1	Fed. 27
		Before noon
March 4-8	Solid Waste and Recycling	Chapter 7
	Panel, Wed. March 6	by Wednesday, March 6
		Before noon
March 11-15	Buildings and Construction	Supplemental readings done
	panel Fri., March 15	by Wednesday, March 13
		Before noon
March 18-22	Spring Break	
March 25-29	The Internet, Phone, Radio	Chapter 8 by Wednesday,
	and Cable panel on Friday,	March 27
	March 29	
		Before noon
April 1-5	Transportation Panel #2,	Chapter 9
Ĩ	Buses, Trains, and Planes.	by Wednesday, April 3
	on Friday, April 5	before noon
April 8-12	Policies and Regulations	Chapter 10 (The Virtue of
_	Panel on Friday, April 12	Necessity)
		by Wednesday, April 10
		Before noon
April 15-19	Agriculture Panel on	Supplemental readings by
	Friday, April 19	Wednesday, April 17
		Before noon
April 22-26	Project work time	Project work time
April 39-May 3	Project work time	Project work time
May 6-10	Final project work time and	Presentation dry run on
*	discussions	May 10.
May 13-17	Final project presentation	Final Presentation,
		Wednesday, May 15
		Final project paper due
		May 17