

***General Information***

<b>Grant McGuire</b> <b>(Instructor)</b>	Office	263 Stevenson
	Office Hours	M: 2:00 – 3:00 W: 11:00 - 12:00 By appointment
	Email	gmcguir1@ucsc.edu
<b>Abby Kaplan</b> <b>(Assistant)</b>	Office	The Cave or Stevenson 269 or 271
	Office Hours	Th: 2-3pm
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**Webpage**      <http://people.ucsc.edu/~gmcguir1/Ling151>

**Meeting Times**

<b>Lectures</b>	MWF	12:30 – 1:40pm	Soc Sci 1, rm161
<b>Lab A</b>	W	3:00 – 4:00pm	MingOng CompLab 108
<b>Lab B</b>	W	4:00 – 5:00pm	MingOng CompLab 108

***Description***

This is an introduction to phonetics concentrating on how experimental methods are used in research into speech sounds. The emphasis is on the acoustics and perception of speech. Topics covered include sound waves; sources and acoustic properties of speech sounds; analysis of waveforms, pitch tracks, and spectrograms; perception of speech sounds. Course work will emphasize hands-on experience with speech analysis software, and students will be learn about experimental design. A major theme throughout the quarter will be the role phonetic principles might have in explaining phonological patterns.

***Readings***

Johnson (2003) *Acoustic and Auditory Phonetics*. Oxford: Basil Blackwell.  
(Optional) Ladefoged (2003) *Phonetic Data Analysis*.  
Various papers available on electronic reserve (I'll notify you).

***Homework***

There will be five homeworks and you will have at least one week to complete each. Generally, you may work on these in groups or consult with your classmates, but the write-ups must be done individually.

### ***Lab sessions***

The laboratory sections of the class are mandatory and provide hands-on experience with the topics covered in the lectures. They will be led by the class teaching assistant, Abby Kaplan. A separate lab syllabus will be given to you on the first lab day.

### ***Academic misconduct***

Don't cheat, plagiarize, etc. I'm obliged to report any misconduct I find, so if you are unclear about how much collaboration is allowed, or simply need more information on what counts as "academic misconduct", please let me know **before** it could be a problem.

### ***Disability services***

If you have, or suspect you may have a disability, please contact the UCSC Disability Resource Center. We will make every effort to accommodate your disability; however we must have sufficient advance knowledge to do this properly.

### ***Grading***

The course grade will be based on your performance on homework assignments, a midterm exam, and a final exam. Late homework cannot be accepted as it is discussed the day that it is due (mostly Mondays). Make-up exams will not be given except in the case of dire, documented medical / family emergencies.

Your final grade will be based on:

Homework assignments 5 @ 10%ea:	50%
Midterm exam:	20%
Final exam:	30%

## Schedule of Readings and Topics

note: these may change as the course progresses; I will (of course) notify you.

KJ: Keith Johnson text

L: Ladefoged text

Week	Day		Topic	Readings	Important Dates
Week 1	F	9/26	Introduction	None	
Week 2 Articulation and the IPA	M	9/29	Consonants	L Ch2	
	W	10/1	Consonants		
	F	10/3	Vowels		
Week 3 Articulation and Aerodynamics	M	10/6	Glottal states	L Ch3	
	W	10/8	Fluid dynamics		Hwk 1 Due
	F	10/10	Turbulence		
Week 4 Computers and Phonetics	M	10/13	Sampling, Autocorrelation	KJ Ch2; L Ch1	
	W	10/15	Spectra and Spectrograms		
	F	10/17	Praat		
Week 5 Source-Filter Theory	M	10/20	Periodic Waves	KJ Ch1	Hwk 2 Due
	W	10/22	Resonance		
	F	10/24	Vowels and Formants	KJ Ch5	
Week 6 Basic Acoustics	M	10/27	Midterm	Everything!	Midterm
	W	10/29	Vowels revisited	KJ Ch6; L Ch7	
	F	10/31	Fricatives	KJ Ch7	
Week 7 Misc.	M	11/3	Stops	KJ Ch8; L Ch6	
	W	11/5	Liquids and Nasals	KJ Ch9	
	F	11/7	Stress & Pitch Accent	L Ch4	
Week 8 Audition and Perception	M	11/10	Tone		Hwk 3 Due
	W	11/12	Audition	KJ Ch3	
	F	11/14	Basics of Perception	KJ Ch4	
Week 9 Perception	M	11/17	Confusion Matrices		
	W	11/19	How perception changes		
	F	11/21	Chymeras		
Week 10 Systems	M	11/24	Consonant systems		
	W	11/26	Vowel systems		
Week 11 Special Topics	M	11/31	Infants and development		Hwk 4 Due
	W	12/3	Music		
	F	12/5	Sociolinguistics		
<b>Final</b>	W	12/10	Everything!	Everything!	Final / Hwk 5