

1st Year Phonetics Course
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Course Description

The phonetics course is addressed to first year and second year students. The first year syllabus is concerned with segmental aspects of the English phonology. The course takes one hour and a half per week. Students are required to have a credible English-to-English dictionary that provides phonemic transcription. They should also download the phonemic chart on their smart phones or their PCs for personal practice. There is no lab session, therefore, the teacher should act as a good model to help students practise the sounds, and students on their turn, need to practise further at home on their own. The accent taught to students is RP (Received Pronunciation), which is non-rhotic. As for the assessment policy, there is a quiz to be taken in class and a written exam administered at the end of the term. The coefficient of the course is 1. All the lessons are linked together, that is, missing one class may cause difficulty of understanding the subsequent lessons.

Course Aims

The course of Phonetics introduces EFL students to phonetic notions and terminology that should help them identify, describe and classify human speech sounds. The course prepares learners to distinguish similar consonants, differentiate between consonants and vowels, learn which sound combinations are possible in English, and relate sound/spelling discrepancies. By the end of the course, students should be able to read phonetic transcription of any word, as well as to transcribe any word phonemically. Students also learn certain phonetic aspects which are peculiar to the English language. The overall aim is to improve the learners' pronunciation skills and to enrich their knowledge about phonetics as they might become future researchers or teachers of the target language. The first year course prepares learners with a sound basis to study the suprasegmental features the next year.

Syllabus Content

First Semester

1. Why study phonetics? (orthographic inconsistency, introducing IPA and the phonemic symbols of the English sounds)
2. Speech production
 - 2.1. Articulators
 - 2.2. Speech mechanism
3. Oro-nasal system: Position of the velum (nasal/oral sounds), centrality vs laterality
4. Phonation system: Voicing/state of glottis (voiced/voiceless, sibilants and pronunciation of final -s and pronunciation of verb final -ed)
5. Articulatory system: Place of articulation
6. Description and classification of consonants
 6. 1. Force/Intensity of articulation (Lenis/fortis consonants)
 6. 2. Pre-fortis clipping (shortening of vowels before fortis consonants)
 - 6.3. Manner of articulation
7. Description and Classification of Vowels:
 - 7.1. Pure vowels/monophthongs
 - 7.2. Diphthongs (glides of diphthongs)
 - 7.3. Weak vowels and phonotactics
8. Distinction between consonants and vowels

Second Semester

9. Description and classification of consonants (introducing the different manners of articulation, level of stricture: obstruents and sonorants)
10. Plosives (aspiration, devoicing, glottalization, phonotactics)
11. Fricatives and affricates (definition, slit/groove, devoicing, phonotactics)
12. Nasals (devoicing, pronunciation of final -ng, nasalization, phonotactics)
13. Approximants (liquids/glides, lateral, devoicing, velarization, rhoticity, phonotactics)
14. Phonetics vs phonology
14. 1. Allophone vs phoneme
14. 2. The phoneme and minimal pairs
14. 3. Narrow phonetic transcription Vs broad phonemic transcription
15. Syllable structure and phonotactics
15. 1. Syllabicity
15. 2. Sonority
15. 3. Strong and weak syllables
15. 4. Syllabification and ambisyllabicity

Readings and Online Resources

- Peter Ladefoged & Keith Johnson. (2001). A Course in Phonetics. Cengage Learning
- Peter Roach. (1991). English Phonetics and Phonology. Cambridge University Press. <http://www.cambridge.org/elt/peterroach/resources.htm> (extra material)
- Gerald Kelly. (2000). How to Teach Pronunciation. Pearson Education Limited
- Paul Skandera & Peter Burleigh. (2005). A Manual of English Phonetics. Gunter Narr Verlag Tübingen
- Mimi Ponsonby. (1982). How Now, Brown Cow? A course in the pronunciation of English. Pergamon Press
- Richard Ogden. (2009). An Introduction to English Phonetics. Edinburgh University Press
- Mehmet S., Yavaş. (2011). Applied English Phonology. Wiley-Blackwell.
- Charles W. Kreidler. (1989). The Pronunciation of English: A Course Book. Blackwell Publishing Ltd
- English to English pronouncing dictionary with RP phonemic transcription such as Cambridge, Longman or Oxford dictionaries.
- Interactive IPA chart: www.ipachart.com
- Download “the phonemic chart” on your PC or as a Mobile Application from www.onestopenglish.com or Macmillan ‘Sounds’, or from British Council ‘Sounds Right’
- Audio and video materials about the English sounds’ descriptions and production: <http://www.rose-medical.com/consonant-sounds.html>
- Google the Vocal Tract Quiz/Game for practising the articulators
- Silent letters: mws.ust.hk/sir/silent_words.php
- Online phonetic keyboard: ipa.typeit.org/full/
- https://www.academia.edu/8063972/Glossary_of_Phonetic_Terms_2?email_work_card=thumbnail
- https://www.academia.edu/43106588/EBOOK_PHONOLOGY?email_work_card=thumbnail
- <https://essentialsoflinguistics.pressbooks.com/part/test-thing/>

- Practising vowels:
http://platea.pntic.mec.es/ffernand/elynx/pdf/Practical_Phonetics_Exercises_Burlington.pdf
- Transcription exercises:
https://is.muni.cz/el/1441/podzim2005/AJ2BP_FF1A/um/transkripce.pdf

1. Why Study Phonetics?

Language is a means of communication. Mastery of language requires three main elements: grammar, vocabulary, and pronunciation. Successful communication involves the use of all these elements to understand and be understood. Pronunciation is a key element in English. Mispronunciation may lead to communication breakdown such as misunderstanding, offence, and lack of comprehension. *Phonetics* is the study and description of pronunciation. It is concerned with the spoken language, not letters, as writing and speaking are two different things. Writing is taken in by the eyes, while speaking is organized sound taken in by the ear. Although there are 26 letters in the English alphabet, these letters cannot represent all 44 sounds, or 45 if the glottal stop is counted. This is mainly because the English spelling form is not phonetic. That is, there is not always a correspondence between the written form of the language and its pronunciation. For example, some words might be written the same, but pronounced differently, such as: **cough**, **though**, **plough**, **although**, **thorough**, **lough**, **hiccough**. Some other words might be written differently but pronounced the same, such as: **meat**, **fleece**, **receive**, **believe**, **media**. Since there is a mismatch between spelling and pronunciation, linguists and phoneticians decided to invent a set of symbols and a system of notations known as the International Phonetic Alphabet (IPA). These phonetic symbols are drawn from the conventional alphabet, variations of letters, Greek letters, and some are completely new inventions and archaic letters.

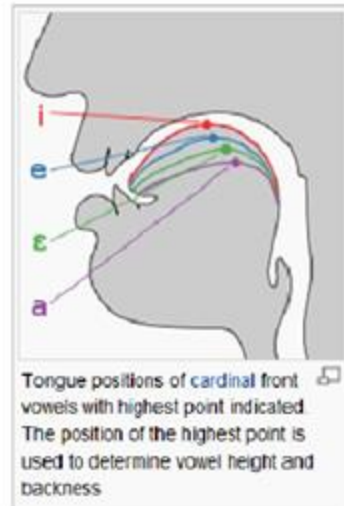
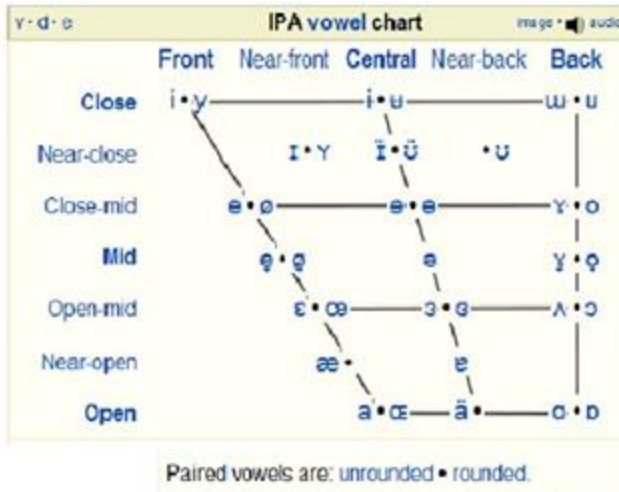
THE INTERNATIONAL PHONETIC ALPHABET (revised to 2005)

CONSONANTS (PULMONIC)

© 2005 IPA

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			ʀ					ʀ		
Tap or Flap		ⱱ		ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			

Where symbols appear in pairs, the one to the right represents a voiced consonant. Shaded areas denote articulations judged impossible.



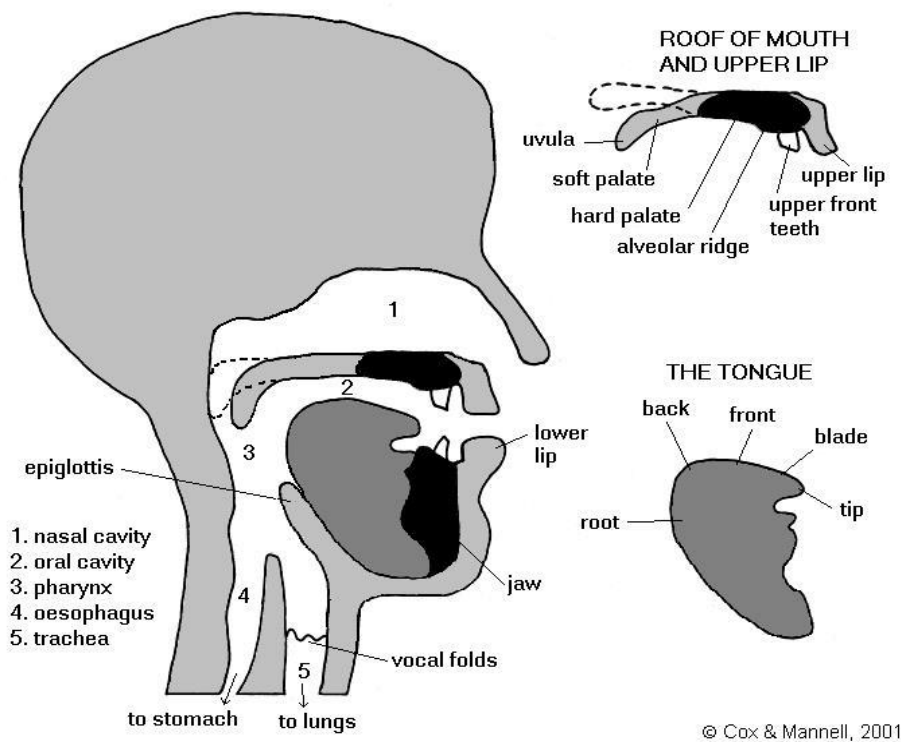
i: READ	I SIT	ʊ BOOK	u: TOO	ɪə HERE	eɪ DAY	John & Sarah Free Materials 1996	
e MEN	ə AMERICA	ɜ: WORD	ɔ: SORT	ʊə TOUR	ɔɪ BOY	əʊ GO	
æ CAT	ʌ BUT	ɑ: PART	ɒ NOT	eə WEAR	aɪ MY	aʊ HOW	
p FIG	b BED	t TIME	d DO	tʃ CHURCH	dʒ JUDGE	k KILO	g GO
f FIVE	v VERY	θ THINK	ð THE	s SIX	z ZOO	ʃ SHORT	ʒ CASUAL
m MILK	n NO	ŋ SING	h HELLO	l LIVE	r READ	w WINDOW	j YES

English Phonemic Chart

2. Production of Speech Sounds

Human beings can produce different kinds of noises and sounds. Certain sounds are *regressive* by pushing air out of the lungs. Other sounds are *ingressive* by sucking air inside. However, speech sounds are usually *egressive* and *pulmonic* which are the result of certain actions happening in the throat and mouth to make the voice audible and recognizable. Audible movements of the tongue and lips, the vibrations of vocal folds, and actions of the soft-palate, all play part in the production of speech.

Producing any sound requires *energy* which comes from the respiratory system. I.e., when people talk, air from the lungs goes up the windpipe and into the larynx, and then out of the mouth or nose. The air passage above the larynx is called the *vocal tract*. There are three cavities in the vocal tract; the pharynx, the mouth, and the nose. The parts within the vocal tract which are used to form sounds are called 'articulators'.



© Cox & Mannell, 2001

Vocal Tract Anatomy

2.1. Articulators

The articulators that form the lower surface of the vocal tract are highly mobile and *active*. They make the movements required for speech by moving toward the *passive* articulators that form the upper surface. Just behind the upper teeth is a small protuberance that people can feel with the tip of the tongue. This is called the alveolar ridge. Next, there is a bony structure in the front part of roof of the mouth called the hard-palate. At the end of the hard-palate, there is the soft-palate which is a muscular flap that can be raised to press against the back wall of the pharynx and shut off the nasal tract. The pharynx is that part between the uvula and the larynx. The larynx (also called the voice box or Adam’s apple) consists of the vocal folds and the glottis. The space between the vocal folds is called the glottis. The vocal folds are two muscles attached to the thyroid cartilage. The tongue, which has different parts, ends with the epiglottis which has a biological function of preventing food from passing to the windpipe, and let it pass through the esophagus instead.

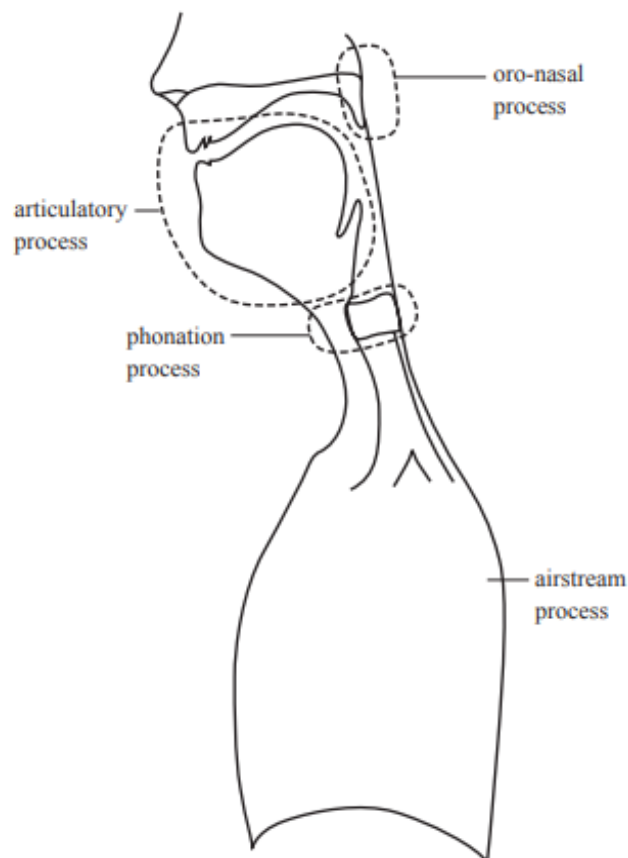
Normal Name	Fancy Name	Adjective
Lips	Labia	Labial
Teeth		Dental
Alveolar ridge		Alveolar
Hard palate		Palatal
Soft palate	Velum	Velar
Uvula		Uvular
Upper throat	Pharynx	Pharyngeal
Voice box (Adam’s Apple)	Larynx	Laryngeal
Tongue tip	Apex	Apical
Tongue blade	Lamina	Laminal
Tongue body	Dorsum (back)	Dorsal
Tongue root		Radical

Further Terms	Adjectives
Tongue	Lingual
Air box (lungs)	Pulmonic
Consonant	Consonantal
Vowel	Vocalic
Voice	Vocal
Apical + laminal	Coronal
Alveolar ridge (teeth ridge)	
Windpipe (trachea)	Tracheal
/w/ is bilabial and velar at the same time	Labio-velar
Upper teeth coming together with lower teeth	Interdental
Position of a consonant between two vowels	Intervocalic
Syllable	Syllabic
When air flows in the centre of the tongue	Central
When air flows to the side(s) of the tongue	Lateral

2.2. Speech Mechanism

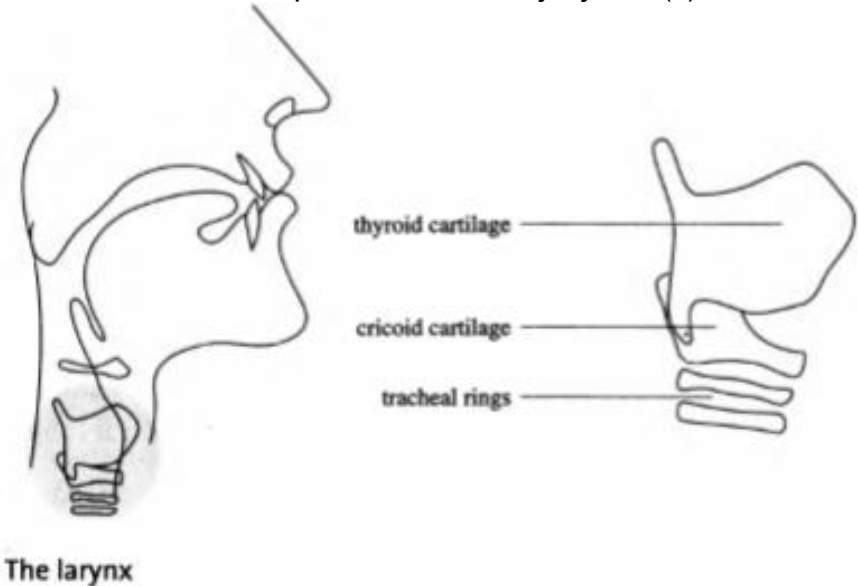
The speech production mechanism involves four main components: airstream process, phonation process, oro-nasal process, and articulatory process.

The four main components of the speech mechanism.



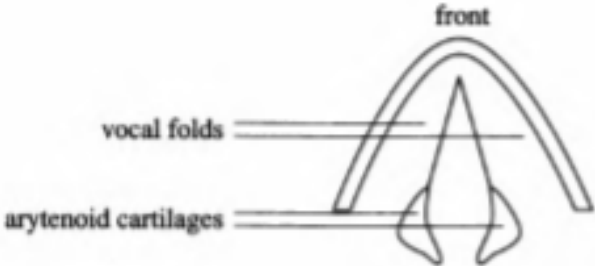
The **airstream process** provides a source of energy for speech by exhaling air out of the lungs (also called air box), or inhaling it inward.

3. The *phonation process* refers to the actions of the vocal folds within the larynx; the sound is voiced when vibrating, and voiceless when apart or not vibrating. The vocal folds' vibration can be felt by putting the fingertip against the larynx. All vowels are voiced. Some consonants are voiced: b d g v ð z ʒ dʒ m n ŋ l r w j. Other consonants are voiceless: p t k f θ s ʃ tʃ h (?)



The larynx

Lateral view of the larynx



The inside of the larynx seen from above

4 States of the Glottis

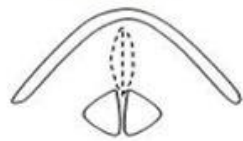
1. Wide Apart
2. Narrow glottis
3. Position for the vocal folds vibration
4. Vocal folds tightly closed



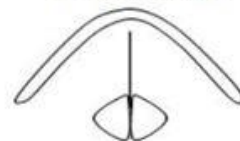
Wide Apart



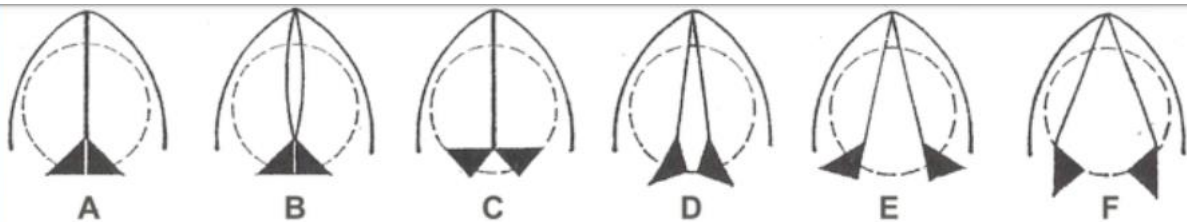
Narrow Glottis



Touched or Nearly Touched



Tightly Closed



- » A: vocal folds and arytenoids closed -> **glottal closure (no airflow)**
- » B: Vocal folds vibrating, arytenoids closed -> **phonation, f₀; voicing**
- » C: Vocal folds close, arytenoids open -> **whisper**
- » D: glottal constriction -> weak unvoiced noise, **glottal fricative [h]**
- » E: rest/breathing position -> **unvoiced consonants**
- » F: deep-breath position (sigh / breathlessness) -> **not used for speech**

Different states of the glottis

Pronunciation of final -s

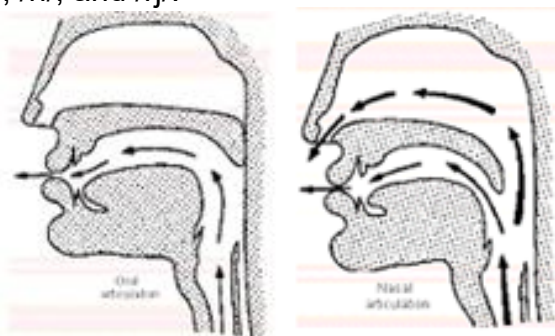
<p>Possessive 's, plural -s, 3rd person singular -s. Sibilants (s z ʃ ʒ tʃ dʒ) are high-pitched sounds with a more obvious hiss. They are interdental as their production requires bringing the upper teeth and the lower teeth together, and they cause a groove in the middle of the tongue. That is why, they are also called groove.</p>	Final -s
<p>Words finishing with a sibilant: /s/, /z/, /ʃ/, /tʃ/, /ʒ/, /dʒ/ E.g., boxes, buzzes, finishes, beaches, garages, bridges /ˈbɒksɪz/, /ˈbʌzɪz/, /ˈfɪnɪʃɪz/, /ˈbi:tʃɪz/, /ˈgærɑ:ʒɪz/, /ˈbrɪdʒɪz/</p> <ul style="list-style-type: none"> • /ʒ/ is rarely final or initial in English. • Words here get an extra syllable 	/ɪz/
<p>All the voiceless sounds except for the voiceless sibilants. E.g., hops, streets, works, coughs, Smith's /hɒps/, /stri:tɪs/, /wɜ:kɪs/, /kɒfs/, /smɪθs/</p> <ul style="list-style-type: none"> • /h/ cannot be final in English. 	/s/
<p>All the voiced sounds except for the voiced sibilants. E.g., grabs, rods, dogs, hives, breathes, rooms, John's, rings, bills, plays, cities /græbz/, /rɒdz/, /dɒgz/, /haɪvz/, /brɪ:ðz/, /ru:mz/, /dʒɒnz/, /rɪŋz/, /bɪlz/, /pleɪz/, /sɪtɪz/</p> <ul style="list-style-type: none"> • /r/, /w/, /j/ cannot be final in English. 	/z/

Pronunciation of final -ed

<p>The rule applies to regular verb only. Words like wicked, sacred, crooked, legged, beloved, naked, wretched are adjectives whereby their final ed is not a suffix. When 'aged' and 'learned' function as adjectives, they are pronounced as /ɪd/, or /əd/ in American English.</p>	Final -ed
<p>If the final sound of the root verb is /t/ or /d/. E.g., wanted, educated, needed, ended → /ˈwɒntɪd/, /ˈedʒʊkeɪtɪd/, /ˈni:ɪd/, /ˈendɪd/</p> <ul style="list-style-type: none"> • Words here get an extra syllable. 	/ɪd/
<p>If the final sound of the root verb is voiceless except for /t/. E.g., laughed, talked, tripped, missed, finished, pinched, berthed → /lɑ:ft/, /tɔ:kt/, /trɪpt/, /mɪst/, /ˈfɪnɪʃt/, /pɪntʃt/, /bɜ:θt/</p> <ul style="list-style-type: none"> • /h/ cannot be final in English. 	/t/
<p>If the final sound of the root verb is voiced except for /d/. E.g., rubbed, begged, called, tamed, tanned, loved, realized, judged, bathed, rowed, purred → /rʌbd/, /begd/, /kɔ:ld/, /teɪmd/, /tænd/, /lʌvd/, /ˈrɪələɪzd/, /ˈdʒʌdʒd/, /beɪðd/, /rəʊd/, /pɜ:d/</p> <ul style="list-style-type: none"> • /r/, /w/, /j/ cannot be final in English. • /ʒ/ is rarely final or initial in English. 	/d/

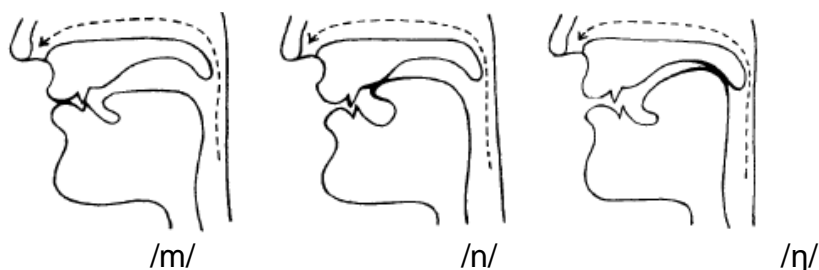
4. The oro-nasal process refers to the actions of the soft-palate (velum). If the velum is raised, the airstream goes out of the mouth, so the sound is oral. If the velum is lowered, the air flow passes through the nose so the sound is nasal. In most speech sounds, the velum is raised creating a velic-closure preventing air from escaping

through the nasal cavity. In English, all vowels are oral, and there are only three nasal consonant sounds: /m/, /n/, and /ŋ/.



Velum raised (the sound is oral)

Velum lowered (the sound is nasal)



5. The articulatory process is concerned with the interaction of the tongue or lips with the roof of the mouth or one of the other different articulators producing different places of articulation known as bilabial, alveolar, palatal, velar, dental, labio-dental, glottal, pharyngeal, uvular, etc.

Place of articulation	
Bilabial	Using closing movement of both lips: /p b m w/
Labio-dental	Using the lower lip and the upper teeth: /f v/
Dental	The apex comes between the teeth or behind the upper teeth: /θ ð/
Alveolar	The lamina comes close to the alveolar ridge: /t d s z l n/
Palato-alveolar	The apex or lamina is used behind the alveolar ridge: /ʃ ʒ tʃ dʒ r/
Palatal	The front of the tongue is raised close to the palate: /j/
Velar	The dorsum is used against the soft palate: /k g ŋ w/
Glottal	The glottis becomes narrow to make an audible friction: /h/ or the glottis is completely closed: /ʔ/

6. Description and classification of Consonants

Consonants are speech sounds which are produced with a partial or complete obstruction to the air flow in the vocal tract. They are described in terms of six factors whereby nasality and laterality are made part of the manner of articulation:

- State of the vocal folds (voiced or voiceless)
- Place of Articulation (the point of articulation)
- Centrality and laterality (central or lateral)
- State of the velum (nasal or oral)
- Manner of articulation (the level of stricture)
- Force of articulation (lenis or fortis)

6.1. Force of Articulation

- If a consonant is voiceless the air stream is strong and it is called fortis.
- If a consonant is voiced the air stream is weak and it is called lenis.
- The difference between **fortis** and **lenis** consonants is more important than voicing in distinguishing sounds, because when sounds are whispered, they lose their voicing and yet we still distinguish them thanks to the force or intensity of articulation.

	plosives	fricatives	affricates	nasals	approximants
Fortis (voiceless)	p t k	f s ʃ θ h	tʃ		
Lenis (voiced)	b d g	v z ʒ ð	dʒ	m n ŋ	l r w j

6.2. Pre-Fortis Clipping

- Vowels followed by fortis consonants are shortened. E.g., *right* [raɪt] Vs *ride* [raɪd], *mute* [mju:t] Vs *mule* [mju:l].
- Diacritic: [ě] [u'] [ěɪ]






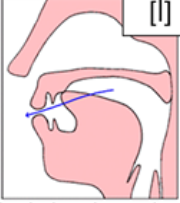


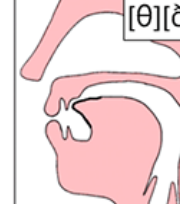



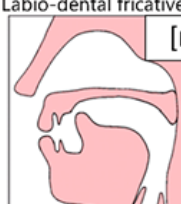


6.3. Manner of Articulation

Manner of Articulation	
Plosive	A complete closure is made somewhere in the vocal tract. Air pressure increases behind the closure and is then released 'explosively': /p t k b d g ʔ/
Affricate	A complete closure is made somewhere in the roof of the mouth. Air pressure increases behind the closure, and is then released more slowly than in plosives: /tʃ dʒ/
Fricative	When two vocal organs come close enough together for the movement of air between them to be heard: /s z f v θ ð ʃ ʒ h/
Nasal	A closure is made somewhere in the mouth, the soft palate is lowered, and air escapes through the nose: /m n ŋ/
Lateral	A partial closure is made by the blade of the tongue against the alveolar ridge. Air is able to flow around the sides of the tongue: /l/
Approximant	Vocal organs come near to each other, but not so close as to cause audible friction: /j w l r/

Minimal Pairs

/i:/ and /ɪ/	sheep, ship	sleep, slip	eat, it	feet, fit	seat, sit
/e/ and /æ/	pen, pan	men, man	lend, land	send, sand	said, sad
/ɔ:/ and /ɒ/	port, pot	sport, spot	short, shot	court, cot	cork, cock
/u:/ and /ʊ/	Luke, look	food, wood	hoot, foot	fool, full	pool, pull
/ɑ:/ and /ʌ/	cart, cut	bark, buck	dark, duck	father, mother	aunt, uncle
/ə/ and /ɜ:/	To learn, to earn	To turn, to burn	A bird, a girl	A word, a curl	The worm, the term

Graphical Descriptions of IPA Symbols

A	B	C
 [t][d] Alveolar plosives	 [m] Bilabial nasal stop	 [k][g] Velar plosives
D	E	F
 [ʃ][ʒ] Palato-alveolar fricatives	 [s][z] Alveolar fricatives	 [l] Alveolar lateral approximant
G	H	I
 [p][b] Bilabial plosives	 [ŋ] Alveolar nasal stop	 [θ][ð] Dental fricatives
J	K	L
 [f][v] Labio-dental fricatives	 [j] Palatal approximant	 [ŋ] Velar nasal stop
M	N	O
 [r] Alveolar approximant	 Dark l [ɫ] Velarized lateral approximant	 [w] Labio-velar approximant

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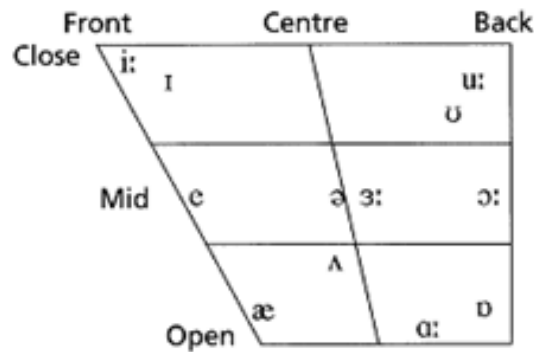
7. Description and classification of Vowels

Vowels are speech sounds which are produced without any obstruction to the air flow in the vocal tract. In the articulation of vowel sounds, the articulators do not come very close together, and so, the passage of the airstream is relatively not obstructed. There are three types of vowels: Pure vowels (also called monophthongs), diphthongs, and weak vowels. They are described in terms of five factors:

- a. The height of the body of the tongue (high or low)
- b. The opening of the jaw (close or open)
- c. The front-back position of the tongue (front or back)
- d. The degree of lip rounding (rounded or unrounded)
- e. The level of tenseness (tense or lax)

English Vowels

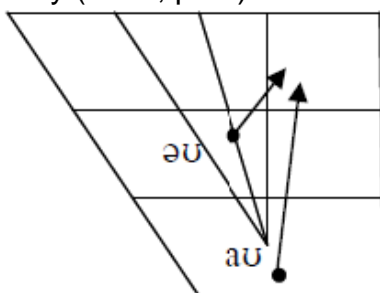
7.1.Pure Vowels	Symbol	Description	Examples
Low (Open)	æ	Open low front short lax unrounded	Hat, attack, antique, plait, can, bat, man, cat, that, apple, stand, mad, madam, charity, cattle, static
	ʌ	Half-open mid-low central short lax unrounded	Run, uncle, front, nourish, does, come, flood, done, twopence, , onion, cousin, dozen, cut, tough
	ɑ:	Open low central-back long tense unrounded	Far, part, half, class, command, clerk, memoir, aunt, hearth, can't, laugh, example, after, chance, are
	ɒ	Open mid-low back short lax rounded	Dog, often, cough, want, become, knowledge, Australia, box, quantity, because, cloth, cough
Mid (Half)	ɔ:	Mid back long tense rounded	Fork, call, snore, taught, bought, board, saw, pour, broad, all, law, horse, water, oral, storm, bald, George, launder, sword, (sure, poor)
	ɜ:	Mid central long tense unrounded	Shirt, her, word, further, pearl, serve, myrtle, heard, worse, journey, perfect, early, world
	ə	Mid central short lax unrounded	About, paper, banana, nation, correct, Oxford, parcel, forgotten, ago, doctor adventure, permission
	e	Mid front short lax unrounded	Egg, left, said, says, head, read (past), instead, any, leisure, leopard, men, Thames, ten, very, many Greenwich, friend, bury,
High (Close)	u:	Close high back long tense rounded	Food, rude, true, who, fruit, soup, June, Huge, suit, loo, vacuum, cue, beauty, tuition, mood, shoe, use
	ʊ	Half-close mid-high central-back short lax rounded	Book, good, woman, push, pull, would, foot, look, wood, wolf, usual, wool, cushion, pudding
	ɪ	Half-close mid-high front-central short lax unrounded	Hit, sausage, biggest, rhythm, mountain, busy, women, sieve, biscuit, hymn, pretty, village, big
	i:	Close front long tense unrounded	tea, key, cheese, scene, police, people, quay, he, she, me, Caesar, chief, phoenix, crises, ceiling, machine, secret, evil, metre



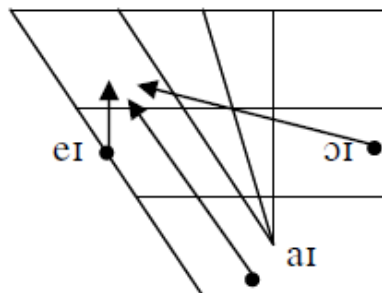
The English Quadrilateral Pure Vowels Chart

7.2.Diphthongs	Symbol	Description	Examples
Centering with schwa /ə/	ɪə	The glide begins from /ɪ/ towards schwa. Lips are spread then become neutral.	beer, beard, fear, pierce, lan, Here, idea
	ʊə	The glide begins from /ʊ/ towards schwa. Lips are rounded then neutral.	sure, endure, secure, pure, obscure, tour, furious, cure, moor
	eə	The glide begins from /e/ towards schwa. Lips remain neutral.	where, there, wear, chair, dare, stare, air
Closing with /ʊ/	əʊ	The glide begins from schwa towards /ʊ/. Lips become rounded.	go, snow, toast, home, hello, although
	aʊ	The glide begins from long /ɑ:/ towards /ʊ/. Lips become rounded.	house, loud, down, how, bough
Closing with /ɪ/	eɪ	The glide begins from /e/ towards /ɪ/. Lips become spread.	Cake, way, weigh, say, pain, they, vein
	ɔɪ	The glide begins from /ɔ:/ towards /ɪ/. Lips change from rounded to neutral.	Toy, avoid, voice, enjoy, boy
	aɪ	The glide begins from /ʌ/ towards /ɪ/. Lips change from neutral to spread.	High, tie, buy, kite, might, cry, eye, height, maestro

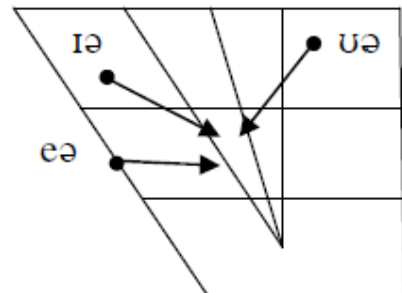
Kelly (2000, p.35)



Closing diphthongs



Closing diphthongs



Centering diphthongs

7.3. Weak Vowels	Symbol	Examples	Description
Schwa /ə/ Central mid	/ə/	Doctor /'dɒktə/ Plumber /'plʌmə/ Canada /'kænədə/ Connect /kə'nekt/ Algerian /æ'l dʒɪəriən/ Famous /'feɪməs/ Hopeless /'həʊpləs/ Hopeful /'həʊpfəl/ Happiness /'hæpɪnəs/	<ul style="list-style-type: none"> It is found in multi-syllable words Or in monosyllable-words in connected speech
Close front	/ɪ/	<ul style="list-style-type: none"> coffee /'kɒfi/, happy /'hæpi/, Toni /'təʊni/, auntie /'ɑ:nti/, smiley /'smɑ:li/ react /ri'ækt/ deactivate reduce preoccupy appreciate hilarious 	<ul style="list-style-type: none"> Usually final in words finishing with -ee, -y, -i, -ie, -ey Esp. when a prefix precedes a vowel In connected speech
Close back	/ʊ/	<ul style="list-style-type: none"> Fluctuate /'flʌktjuet/ Graduate Influenza Evacuation 	<ul style="list-style-type: none"> When it precedes a vowel In connected speech

Phonotactics

Open syllables are syllables which end in a vowel. Only tense vowels and weak vowels may occur in open syllables. E.g., play /pleɪ/, my /maɪ/, cow /kaʊ/, flu /flu:/, brother /'brʌðə/, video /'vɪdɪəʊ/, funny /'fʌni/

Closed syllables are syllables which end with a consonant(s).

Short vowels can never be final in English. They are always followed by a consonant(s).

Tongue High ↕ Low	Vowels				Diphthongs			Intonation & Stress	
	Front ← → Back				End at front → End at back			Fall	↘
	i:	ɪ	ʊ	u:	eɪ	ɪə	əʊ	Fall/Rise	↗
	e	ə	ɜ:	ɔ:	ɔɪ	ʊə	aʊ	Rise	↗
	æ	ʌ	ɑ:	ɒ	aɪ	eə		Rise/Fall	↘
	Lips can be:				aɪ	eə		Level	→
	Spread	Neutral	Rounded		Closing	Centring	Closing	Primary stress ' Secondary stress ,	

8. Difference between Vowels and Consonants

Vowels	Consonants
Always produced with vibration	Produced with or without vibration
Air escapes through the mouth only	Air escapes through the mouth or nose
The air stream is not blocked in any way in the throat or mouth by the tongue and/or lips (-consonantal)	The air stream from the lungs is completely or partially blocked by the tongue or lips (+consonantal)

		Place of articulation							
		Front → Back							glottal
		bilabial	labio-dental	dental	alveolar	palato-alveolar	palatal	velar	
Manner of articulation	plosive	p b			t d			k g	
	affricate					tʃ dʒ			
	fricative		f v	θ ð	s z	ʃ ʒ			h
	nasal	m			n			ŋ	
	lateral				l				
	approximant	(w)					r	j	w

(Unvoiced phonemes are on a shaded background. Voiced phonemes are on a white background.)

		Front ← → Back							
		How to make the sound: Don't use your voice Use your voice							
		Put both lips together	Use top teeth and bottom lip	Use tongue behind top teeth	Touch bump behind teeth with tongue	Between ↔	Hard bit of the roof of mouth	Touch roof of mouth (the soft bit) with your tongue	Use your throat
What happens?	Stop air. Let it go suddenly	p b			t d			k g	
	Stop air. Let it go gradually					tʃ dʒ			
	Let air pass through		f v	θ ð	s z	ʃ ʒ			h
	Let air out of your nose	m			n			ŋ	
	Air goes round tongue				l				
	Nearly touching	(w)					r	j	w

First Term Phonetics Practice Activities

1. Classify the following verbs and adjectives according to their final –ed pronunciation.

Laughed freaked crammed damaged cleaned wicked watched faced
 needed tilted astonished amused wretched dogged acknowledged
 beloved breathed believed

/t/	/d/	/ɪd/

2. Classify the following verbs and adjectives according to their final –s pronunciation.

Hedges boxes bosses bridges universities tries misses Mrs houses
 climbs rights plays gigs makes mops doors runs shines Smith's
 p's workers

/s/	/z/	/ɪz/

3. Transcribe the following words. In each line, circle the word(s) that begin(s) with a consonant that meets the description on the left.

Alveolar	meat	pat	sit	boat	Rate
Velar	green	tool	case	hot	knot
Labio-dental	cat	this	chat	vat	fat
Bilabial	brick	thick	lick	sick	pick
Dental	pay	thank	witch	thought	tough
Palato-alveolar	sigh	clay	tie	sure	judge
Nasal	church	garage	noon	jury	touch
Lateral	boat	late	pray	never	love

4. Transcribe the following words and circle the one(s) that contain(s) a vowel that fits the description on the left.

Low	small	bat	great	car	flea
Front	river	song	tell	trap	bright
Back	loud	so	left	mud	trip
High	shore	shop	bank	fall	moose
Unrounded	meet	coarse	such	group	cry
Tense	red	lift	rat	blow	dark

5. In each of the following, state whether it is a natural class in English. If it is, define it in terms of the minimal set of features needed to distinguish it from all other sets of phonemes. E.g.: /s, z, ʃ, ʒ, tʃ, dʒ/: sibilants, /p, b, m, w/: bilabials
 /m, n, ŋ/ /w, g, k, ŋ/

/u:, ʊ, ɔ:, ɒ/ /t, ʃ, θ, ʔ, s, h/
 /p, b, v, f, m, w/ /t, s, z, n, d/

6. Rewrite the following passages into ordinary orthographic form. Read aloud.

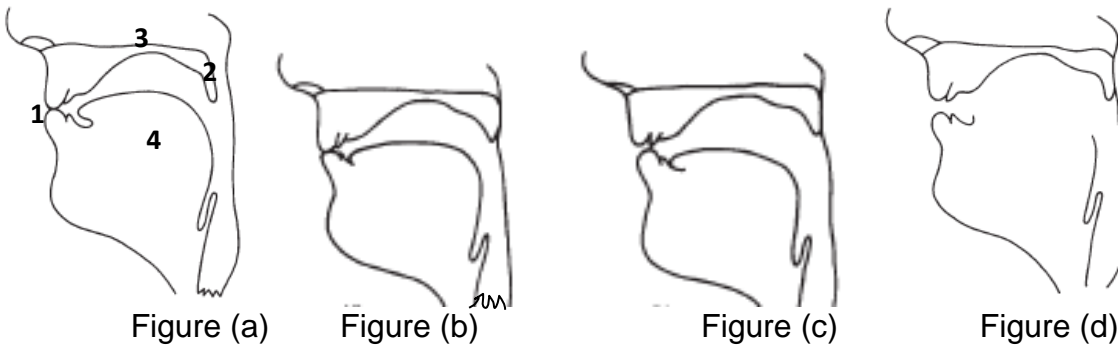
One Foot – Two Feet

'pi:p| həv tu: fi:t | ðei həv ə raɪt fʊt ənd ə left fʊt | fʊt ɪz 'sɪŋgjʊlə | ɪt mi:nz wʌn | fi:t ɪz
 'plʊərəl | ɪt mi:nz tu: | ə fʊt hæz ə tɒp | ə 'bɒtəm | ə hi:l | ənd faɪv təʊz | ðə 'lɑ:dʒɪst təʊ
 ɪz kə:ld ðə big təʊ | ðə 'smɔ:lɪst təʊ ɪz kə:ld ðə 'lɪt| təʊ ɔ: ðə 'lɪt| 'pɪɡɪ | i:tʃ təʊ hæz ə
 neɪl | fi:t ə ɪm'pɔ:tɪnt | wi wɔ:k ɒn 'aʊə fi:t | 'rʌn ɒn 'aʊə fi:t | dɑ:ns ɒn 'aʊə fi:t | ənd plɛɪ
 spɔ:ts ɒn 'aʊə fi:t | wɒt els kən wi du: wɪð 'aʊə fi:t |

First Day of Summer

| ðə fɜ:st dei əv 'sʌmə ɪz dʒu:n 'twenti ɔ: 'twenti wʌn | 'sʌmə ɪz ðə 'si:zŋ 'ɑ:ftə sprɪŋ
 ənd bi'fɔ:(r) 'ɔ:təm | 'ɪt ɪz ðə 'hɒtɪst 'si:zŋ əv ðə jɪə | 'sʌmə ɪz ə flʌ 'si:zŋ | 'ɪt ɪz ə gʊd
 taɪm fə 'aʊtɔ:(r) æk'tɪvətɪz | 'meni 'pi:p| plɛɪ spɔ:ts 'dʒʊəriŋ ðə 'sʌmə | 'lðəz gəʊ tu
 ðə bi:tʃ ɔ: ðə pɑ:k | səm 'fæməɪz gəʊ ɒn və'keɪʃŋ 'dʒʊəriŋ ðə 'sʌmə |

7. Have a look at the following figures (a, b, c, and d), and fill in the gaps with the right technical term.



1. Figure (a) represents the consonant sound /...../. It is articulated by bringing the (1) together and by the(2), to allow air flow to pass through the (3).
2. The consonant sound in figure (b) is /...../; it has the same place of articulation as the consonant in figure (a), that is both are Both share the same voicing too which is The main difference between the two is that in figure (a), the sound is and in figure (b), it is
3. The consonant sound in figure (c) /...../ can be described as being oral. Its place of articulation is
4. In figure (d), draw the position of the (4) for the voiceless /k/.