



TEMARIO

EXAMEN DE ADMISIÓN

A

CUARTO NIVEL



MATERIAS PLAN 2020:

- Biología I
- Inglés III
- Geometría y Trigonometría
- Física I
- Taller de Lectura y Redacción I
- México Contemporáneo



Biología I

I. Composición, características y clasificación de los seres vivos

1.1 Características de los seres vivos

1.1.1 La organización, metabolismo, reproducción, estructura, homeostasis, irritabilidad, adaptación

1.1.2 La interrelación de los seres vivos con su medio

1.1.3 Características estructurales y funcionales

1.2 Características generales de Reinos y Dominios

1.2.1 Niveles taxonómicos y criterios para el establecimiento de dominios en plantas y animales

1.3 Características de virus, viroides y priones e interacción con los seres vivos

1.4 La composición química de los seres vivos

1.4.1 Agua y sales minerales

1.4.2 Descripción de las Biomoléculas: carbohidratos, lípidos, proteínas y vitaminas

II. La célula como unidad de los seres vivos

2.1 La formulación de la teoría celular y sus aportaciones

2.2 Tipos celulares

2.3 La regulación del transporte en la membrana plasmática

2.4 Organelos y estructuras celulares y fisiología

2.5 Metabolismo celular

2.5.1 Fotosíntesis

2.5.2 La respiración anaerobia y aerobia

III. Mecanismos de continuidad de los seres vivos

3.1 Ciclo Celular (fases)

3.1.1 Apoptosis, Necrosis y el cáncer

3.1.2 Mitosis

3.1.3 Meiosis

3.2 Herencia y Leyes de Mendel

3.2.1 Codominancia, dominancia incompleta y herencia ligada al sexo

3.2.2 Anomalías Genéticas

3.3 Estructura y función de ADN y ARN

3.3.1 La replicación del ADN y su aplicación: PCR

3.3.2 La transcripción

3.3.3 Código Genético y la traducción (la síntesis de proteínas)

3.3.4 Genes, Secuencias Codificantes y Regulatorias



IV. Genoma y Biotecnología

4.1.1 4.2 Epigénesis

4.1.2 4.3 Proyecto Genoma y sus componentes

4.1.3 4.3.1 Complejidad del Genoma y la escala evolutiva

4.1.4 4.4 Tecnología del ADN

4.1.5 4.4.1 Las aplicaciones biotecnológicas.



Inglés III

- I. Anécdotas, incidentes y noticias. Pasado continuo y la relación entre pasado simple y pasado continuo. Pronombres reflexivos.
- II. Lo que hacía el hombre en el pasado. "Used to".
- III. Entretenimiento "Like / Love / Hate", Verbos. Pronombres indefinidos (Afirmación y negación). Pronombres recíprocos.
- IV. Invitaciones y citas sociales. Verbos modales para invitaciones.
- V. Vida animal. Introducción a los patrones de verbo. Conjunciones.
- VI. Maravillas del mundo. Adjetivos comparativos y superlativos.
- VII. Itinerario de actividades en el campo y en la ciudad. Preposiciones de lugar. Verbos compuestos. Verbos relacionados al uso del tiempo.
- VIII. Planes / Vacaciones. Presente continuo con significado de futuro. Futuro "will" y "going to". Expresiones de tiempo en futuro.
- IX. El medio ambiente: problemas y soluciones. Introducción al cero condicional y primer condicional.

Contenido Temático	Contenido Gramatical	Vocabulario				Actividades de aprendizaje																												
Repaso del nivel 2																																		
Anécdotas, incidentes y noticias	Pasado continuo y la relación entre pasado simple y pasado continuo	<table><tr><th>Afirmativo</th><th>Negativo</th><th>Negativo Contraído</th><th>Interrogativo</th></tr><tr><td>I was going</td><td>I was not going</td><td>I wasn't going</td><td>Was I going?</td></tr><tr><td>You were going</td><td>You were not going</td><td>You weren't going</td><td>Were you going?</td></tr><tr><td>He/she/it was going</td><td>He/she/it was not going</td><td>He/she/it wasn't going</td><td>Was he/she/it going?</td></tr><tr><td>You were going</td><td>You were not going</td><td>We weren't going</td><td>Were you going?</td></tr><tr><td>We were going</td><td>We were not going</td><td>We weren't going</td><td>Were we going?</td></tr><tr><td>They were going</td><td>They were not going</td><td>They weren't going</td><td>Were they going?</td></tr></table>				Afirmativo	Negativo	Negativo Contraído	Interrogativo	I was going	I was not going	I wasn't going	Was I going?	You were going	You were not going	You weren't going	Were you going?	He/she/it was going	He/she/it was not going	He/she/it wasn't going	Was he/she/it going?	You were going	You were not going	We weren't going	Were you going?	We were going	We were not going	We weren't going	Were we going?	They were going	They were not going	They weren't going	Were they going?	(W) Narrar una anécdota. (R) Leer sobre situaciones embarazosas de alguna celebridad. (S)(L) Relatar y escuchar algún incidente que haya ocurrido.
	Afirmativo	Negativo	Negativo Contraído	Interrogativo																														
I was going	I was not going	I wasn't going	Was I going?																															
You were going	You were not going	You weren't going	Were you going?																															
He/she/it was going	He/she/it was not going	He/she/it wasn't going	Was he/she/it going?																															
You were going	You were not going	We weren't going	Were you going?																															
We were going	We were not going	We weren't going	Were we going?																															
They were going	They were not going	They weren't going	Were they going?																															
	Pronombres reflexivos	Situaciones embarazosas / Embarrassing-awkward situations: walk into a glass door, spill sauce on your shirt, wear slippers to class, fall asleep in class, knock something over, say the wrong name, wear clothes inside out, sit on wet paint, wave at someone you think you know, show up on the wrong day of an appointment, miss the bus stop, fall down in the middle of the street, bump into someone/something, make a fool yourself. Conectores/ Conectors: when, while Reflexivos/ Reflexive pronouns: myself/yourself/herself/himself/itself/ourselves/yourselves/themselves Expresiones para dar continuidad/ Follow-up expressions: That's interesting/ awesome/ awful/ hilarious/ amazing/ fabulous/ great/ lovely. Oh, no! That sounds embarrassing Oh, that's nice Well, that was lucky Oh, no! I bet you were upset. I guess you weren't happy with that I can't believe it. That's really annoying Oh, no! I bet you freaked out Expresiones de Tiempo/ Time Expressions: when, while, in those days, all morning, for hours, at that time.																																
Lo que hacía el hombre en el pasado	Used to	<table><tr><th>Afirmativo</th><th>Negativo</th><th>Interrogativo</th></tr></table>				Afirmativo	Negativo	Interrogativo	(W) (R) Escribir e intercambiar información sobre las actividades que se solían hacer diferentes a las que se hacen ahora.																									
Afirmativo	Negativo	Interrogativo																																



		<table><tr><td><i>I used to go</i></td><td><i>I didn't use to go</i></td><td><i>Did I use to go?</i></td></tr><tr><td><i>You used to go</i></td><td><i>You didn't use to go</i></td><td><i>Did you use to go?</i></td></tr><tr><td><i>He used to go</i></td><td><i>He didn't use to go</i></td><td><i>Did he use to go?</i></td></tr><tr><td><i>She used to go</i></td><td><i>She didn't use to go</i></td><td><i>Did she use to go?</i></td></tr><tr><td><i>It used to go</i></td><td><i>It didn't use to go</i></td><td><i>Did it use to go?</i></td></tr><tr><td><i>We used to go</i></td><td><i>We didn't use to go</i></td><td><i>Did we use to go?</i></td></tr><tr><td><i>They used to go</i></td><td><i>They didn't use to go</i></td><td><i>Did they use to go?</i></td></tr></table> Etapas históricas/ Historical eras: Pre-historic era, Ancient period, Dark ages, Viking age, Middle ages, Renaissance, Victorian era, Age of Enlightenment, Industrial Revolution, Modern age, Digital Revolution.	<i>I used to go</i>	<i>I didn't use to go</i>	<i>Did I use to go?</i>	<i>You used to go</i>	<i>You didn't use to go</i>	<i>Did you use to go?</i>	<i>He used to go</i>	<i>He didn't use to go</i>	<i>Did he use to go?</i>	<i>She used to go</i>	<i>She didn't use to go</i>	<i>Did she use to go?</i>	<i>It used to go</i>	<i>It didn't use to go</i>	<i>Did it use to go?</i>	<i>We used to go</i>	<i>We didn't use to go</i>	<i>Did we use to go?</i>	<i>They used to go</i>	<i>They didn't use to go</i>	<i>Did they use to go?</i>	(S) (L) Entrevistas con sus compañeros sobre el tema.
<i>I used to go</i>	<i>I didn't use to go</i>	<i>Did I use to go?</i>																						
<i>You used to go</i>	<i>You didn't use to go</i>	<i>Did you use to go?</i>																						
<i>He used to go</i>	<i>He didn't use to go</i>	<i>Did he use to go?</i>																						
<i>She used to go</i>	<i>She didn't use to go</i>	<i>Did she use to go?</i>																						
<i>It used to go</i>	<i>It didn't use to go</i>	<i>Did it use to go?</i>																						
<i>We used to go</i>	<i>We didn't use to go</i>	<i>Did we use to go?</i>																						
<i>They used to go</i>	<i>They didn't use to go</i>	<i>Did they use to go?</i>																						
Entretención	Like/ Love/ Hate Verbos Pronombres indefinidos (Afirmación y negación) Pronombres recíprocos	Instrumentos musicales/ musical instruments: piano, flute, guitar, electric guitar, bass, drums, violin, cello, clarinet, harmonica, organ, key board. Pronombres indefinidos en afirmación/ indefinite affirmative pronouns: anybody/anyone, somebody/someone, anyone/ anything, everyone/everything, all, every, each, another/other, everywhere/anywhere, somehow/anyhow, several/some, something. Pronombres indefinidos en negación/ indefinite negative pronouns: not everybody/ not everyone/ not everything/ not everywhere/ not all. Pronombres recíprocos/ Reciprocal pronouns: each other, one another Géneros musicales/ Music Genres: classical, rock, heavy metal, easy listening, opera, instrumental, orchestra, pop, jazz, Tex-Mex, disco, electronic, country, K-pop, Mexican Regional music, folk, salsa, cumbia. Géneros filmográficos/ Film genres: drama, comedy, horror, action, romance, animated, thriller, science fiction/sci-fi, documentary. Entreténimientó/Entertainment: soap operas, game shows, news, cartoons, talk shows, reality shows, anime, series.	(W) Hacer una ponencia de sus gustos musicales de ahora y antes. (L) Escuchar la lista de nominados a una premiación (Oscar/ Grammy/ Emmy). (W) (S) (L) Role-play sobre las premiaciones en los Oscar, Grammy, Emmy. (S) Hacer un video con una crítica a una película o show de televisión.																					
Invitaciones y citas sociales	Verbos modales para invitaciones	Expresiones relacionadas a invitaciones y citas sociales/ Expressions related to invitations and social dating: Would you like to go to...? May I go with you to...? Shall we...? Could we...? Can I join you? Can I invite you to...? Would you like to go out? Would you like to come with me? I am sorry, but I won't be able to... Let's go to...	(L) (W) Observar un video que incluya diferentes eventos sociales y elaborar una invitación en línea para uno de ellos. (S) Elaborar un dialogo modelado invitando a un compañero a un evento social. (R) Realizar una lectura sobre las diferentes tradiciones y costumbres en los eventos sociales al rededor del mundo y contestar preguntas de comprensión lectora.																					
		Congratulations. I am happy to hear about... I am delighted with... I am sorry for your loss. My sincere/deepest condolences. Eventos sociales y de vida/ Social and life events: family/friends get together, farewell party, wedding, graduation ceremony, prom, blind date, engagement party, bachelor/bachelorette party, birthday party, baby shower, baptism, christening, birth, decease/death, funeral, memorial service, anniversary, religious ceremony.																						



Vida animal	Introducción a los patrones de verbo Conjunciones	Patrones de Verbo/ Verb Patterns Verb + gerund (-ing): avoid, can't stand, don't mind, enjoy, hate, like, love, spend time, admit, consider, deny, imagine, remember, suggest, start, stop, begin, finish, keep, miss, practice, risk. Verb + to infinitive: agree, love, hope, remember, learn, arrange, mean, plan, prefer, help, fail, try, can't afford, choose, decide, forget, manage, need, refuse, want, like, would like. Conjunciones/ Conjunctions Coordinating conjunctions: and, but, or, nor, for, yet, so. Subordinating conjunctions: although, because, since, unless, therefore. Animales domesticos y de granja/Domestic and farm animals: dog, cat, donkey, horse, cow, goat, pig, hen, rooster, mouse (mice), rabbit, canary, goose (geese), sheep. Animales salvajes/Wild animals: bird, eagle, bee, insect, butterfly, bear, moose, tiger, lion, crocodile, jiraffe, wolf/wolves, snake, bat, deer. Animales marinos/Sea animals: fish, dolphin, turtle, shark, whale, crab, shell fish, octopus, sea horse, shrimp, lobster, jelly fish, oysters. Zoo, kennel, field, cage, nature reserve, natural environment, farm, barn.	(W) Describir el animal le gustaría conocer. (W) (S) Realizar una encuesta usando los verbos propuestos en el vocabulario referidos a los animales. (R) Hacer una investigación sobre los animales en su ecosistema y sus hábitos. (S) Presentaciones orales de su investigación. (L) (S) (W) Reportar, por escrito o de manera oral, sobre un video acerca de vida animal.
Maravillas del mundo	Adjetivos comparativos y superlativos	Adjetivos comparativos/ Comparative adjectives: Add -er, add -est Ending in -y: -ier Doble consonant(cvc): big-bigger- the biggest As a complement of Be -Excepciones/ exceptions bad-worse-the worst good-better- the best little-less- the least	(W) Usar imagenes para escribir descripciones y comparaciones de maravillas. (R) Leer sobre una maravilla del mundo. (L) (S) Conversación entre dos estudiantes comparando maravillas. (L) (W) Escuchar un documental y crear un reporte escrito.
		Adjetivos/adjectives: quick, easy, busy, slow, nice, hard, cheap, convenient, popular, outstanding, expensive, personal, interesting, big, small, tiny, large, enormous, shiny, smooth, rough, slippery, long, short, deep, shallow, square, round, rectangular. Maravillas naturales/Natural wonders: archipelago, desert, island, mountain, rain forest, river, coast, glacier, lake, ocean, reef, volcano, waterfall, canyon, cave, valley, rainbow, lighting, wildlife, northern light, tornado. Maravillas hechas por el hombre/Man made wonders: skyscraper, monument, stadium, pyramid, ruin, Eiffel Tower, the Great Wall, Taj Mahal palace, Ancient City, Golden Gate Bridge, Capilano Suspension Bridge, Statue of Liberty, Sheikh Zayed Grand Mosque, Christ the Redeemer.	
Itinerario de actividades en el campo y en la ciudad.	Preposiciones de lugar Verbos compuestos Verbos relacionados al uso del tiempo	Preposiciones/Prepositions: in front of, behind, in the middle of, between, above, below, across from, to the left/ to the right, inside of, in/on the corner (of), on, under, next to. Verbos compuestos/ phrasal verbs: go down, go up, take- turn right / left, walk, drive, go straight ahead, go forward, go back, go by, get off, get on, stop at. Verbos de tiempo/ time related verbs: spend time, invest time, save time, waste time + verb(ing) Ciudad/ City: gym, garden, bank, drugstore/ pharmacy, post office, newsstand, hotel, clothing store, shoe store, cinema/ movie theater, building, main square, bus station, gas station, block(s), street, alley, highway, tunnel, rotary/ roundabout, bridge, traffic light, street sign, billboard, bar, night club, sport center, town hall. El campo/Countryside: hostel, inn, bed and breakfast, tent, campsite, mountain, mountainside, hill, hillside, field, farm. Itinerary /schedule Puntos cardinales/ Compass points: north, south, east, west.	(W) Describir la ruta más apropiada de un punto en la ciudad a su casa, usando preferentemente Google Maps. (W) Escribir una nota a un foráneo dando indicaciones para llegar a un lugar en específico. (R) (W) (S) Reportar una investigación sobre los datos de ubicación de un hotel o lugar de interés usando verbos compuestos. (S) (L) Dar direcciones para llegar a un lugar importante en su ciudad desde la central de autobuses o del aeropuerto/estación del tren. Se puede usar Google Maps como una guía



Planes/ Vacaciones	Presente continuo con significado de futuro	Presente continuo/ Present continuous Subject+to be+verb -ing				(W) Crear una lista de preguntas para aplicar una encuesta sobre sus planes de vida.																																																																																																																																									
	Futuro will y going to	<table><tr><th colspan="4">Futuros inciertos, promesas, predicciones/ Will</th></tr><tr><th>Afirmativo</th><th>Negativo</th><th>Negativo contraído</th><th>Interrogativo</th><td rowspan="9">(S) Hablar de sus planes a realizar a corto y mediano plazo.</td></tr><tr><td>I will go</td><td>I will not go</td><td>I won't go</td><td>Will I go?</td></tr><tr><td>You will go</td><td>You will not go</td><td>You won't go</td><td>Will you go?</td></tr><tr><td>She will go</td><td>She will not go</td><td>She won't go</td><td>Will she go?</td></tr><tr><td>He will go</td><td>He will not go</td><td>He won't go</td><td>Will he go?</td></tr><tr><td>It will go</td><td>It will not go</td><td>It won't go</td><td>Will it go?</td></tr><tr><td>We will go</td><td>We will not go</td><td>We won't go</td><td>Will we go?</td></tr><tr><td>You will go</td><td>You will not go</td><td>You won't go</td><td>Will you go?</td></tr><tr><td>They will go</td><td>They will not go</td><td>They won't go</td><td>Will they go?</td></tr><tr><td colspan="4">Para cuando se ha realizado alguna acción cuyo resultado es evidente: Going to + verb (infinitive)</td><td>(L) Escuchar un blog o podcast de recomendaciones de viaje.</td></tr><tr><td rowspan="15"></td><td rowspan="15">Expresiones de tiempo en futuro</td><td colspan="4"><table><tr><th>Afirmativo</th><th>Negativo</th><th>Negativo contraído</th><th>Interrogativo</th></tr><tr><td>I am going to go</td><td>I am not going to go</td><td>I'm not going to go</td><td>Am I going to go?</td></tr><tr><td>You are going to go</td><td>You are not going to go</td><td>You aren't going to go</td><td>Are you going to go?</td></tr><tr><td>He is going to go</td><td>He is not going to go</td><td>He isn't going to go</td><td>Is he going to go?</td></tr><tr><td>She is going to go</td><td>She is not going to go</td><td>She isn't going to go</td><td>Is she going to go?</td></tr><tr><td>It is going to go</td><td>It is not going to go</td><td>It isn't going to go</td><td>Is it going to go?</td></tr><tr><td>We are going to go</td><td>We are not going to go</td><td>We aren't going to go</td><td>Are we going to go?</td></tr><tr><td>You are going to go</td><td>You are not going to go</td><td>You aren't going to go</td><td>Are you going to go?</td></tr></table></td><td>(W) Elaborar una infografía sobre tu viaje ideal. (dónde, qué objetos a llevar y actividades a realizar).</td></tr><tr><td colspan="4">Expresiones de tiempo/Time expressions: tomorrow, the day after tomorrow, next week, month, year, later, later in the week, in an hour, soon, in the near future.</td><td rowspan="7">(S) Hacer predicciones de viaje a un compañero con role-play de Fortune Teller.</td></tr><tr><td colspan="4">Planes y vacaciones/Vacation Plans: Camp, b & b (bed and breakfast), motel, resort, camp site, excursion, hostel, destination, journey, holiday, passenger, route, tour, tourist, travel, trip, occupancy, front desk, concierge, beach, city, picnic, take photographs, pack, go camping, go sightseeing, booking, travel by (plane, car, bus, train, ship).</td></tr><tr><td colspan="4">Metas personales y profesionales/ Personal and professional Goals: Verbs: work, study, travel, do a masters/ doctorate/ PhD, change job, go on an exchange program, plan, afford.</td></tr><tr><td colspan="4"></td></tr><tr><td colspan="4"></td></tr><tr><td colspan="4"></td></tr><tr><td colspan="4"></td></tr><tr><td></td><td></td><td colspan="4">Nouns: plan, objective, ambition, prediction, expectation, masters, doctorate/ PhD.</td><td></td></tr><tr><td></td><td></td><td colspan="4">Objetos comunes para viaje/ Common Travel objects: bathing suit, sleeping bag, tent, insect repellent, first-aid kit, flashlight, batteries, towel, sandals, toiletries, sunscreen, razor, hair dryer, brush, comb, toothbrush, toothpaste, sunglasses, suitcase/ luggage, passport, visa, postcards, souvenirs, map, backpack, pictures, camera.</td><td></td></tr><tr><td rowspan="2">El medio ambiente: problemas y soluciones</td><td rowspan="2">Introducción al cero condicional y primer condicional</td><td colspan="4">If clause+ consequence Cero condicional/ Zero conditional: If + present simple, present simple. Primer condicional/ First Conditional If + present simple, ... will + infinitive</td><td rowspan="2">(W) Ensayo sobre problemas con el medio ambiente (R) Leer sobre la problemática medioambiental global y presentar las ideas principales. (W) (S) Expresar de una manera verbal y escrita una propuesta de solución a la problemática ambiental en su contexto local.</td></tr><tr><td colspan="4">Sobre el medio ambiente/ about the environment: water, overpopulation, pollution, contamination, smog, growth, economic investment, environment, global warming, reuse, reduce, recycle, landfill, renewable source, ecofriendly, ecosystems, biodegradable, extinction, waste, greenhouse effect, carbon foot print, organic, inorganic, solar energy.</td></tr></table>				Futuros inciertos, promesas, predicciones/ Will				Afirmativo	Negativo	Negativo contraído	Interrogativo	(S) Hablar de sus planes a realizar a corto y mediano plazo.	I will go	I will not go	I won't go	Will I go?	You will go	You will not go	You won't go	Will you go?	She will go	She will not go	She won't go	Will she go?	He will go	He will not go	He won't go	Will he go?	It will go	It will not go	It won't go	Will it go?	We will go	We will not go	We won't go	Will we go?	You will go	You will not go	You won't go	Will you go?	They will go	They will not go	They won't go	Will they go?	Para cuando se ha realizado alguna acción cuyo resultado es evidente: Going to + verb (infinitive)				(L) Escuchar un blog o podcast de recomendaciones de viaje.		Expresiones de tiempo en futuro	<table><tr><th>Afirmativo</th><th>Negativo</th><th>Negativo contraído</th><th>Interrogativo</th></tr><tr><td>I am going to go</td><td>I am not going to go</td><td>I'm not going to go</td><td>Am I going to go?</td></tr><tr><td>You are going to go</td><td>You are not going to go</td><td>You aren't going to go</td><td>Are you going to go?</td></tr><tr><td>He is going to go</td><td>He is not going to go</td><td>He isn't going to go</td><td>Is he going to go?</td></tr><tr><td>She is going to go</td><td>She is not going to go</td><td>She isn't going to go</td><td>Is she going to go?</td></tr><tr><td>It is going to go</td><td>It is not going to go</td><td>It isn't going to go</td><td>Is it going to go?</td></tr><tr><td>We are going to go</td><td>We are not going to go</td><td>We aren't going to go</td><td>Are we going to go?</td></tr><tr><td>You are going to go</td><td>You are not going to go</td><td>You aren't going to go</td><td>Are you going to go?</td></tr></table>				Afirmativo	Negativo	Negativo contraído	Interrogativo	I am going to go	I am not going to go	I'm not going to go	Am I going to go?	You are going to go	You are not going to go	You aren't going to go	Are you going to go?	He is going to go	He is not going to go	He isn't going to go	Is he going to go?	She is going to go	She is not going to go	She isn't going to go	Is she going to go?	It is going to go	It is not going to go	It isn't going to go	Is it going to go?	We are going to go	We are not going to go	We aren't going to go	Are we going to go?	You are going to go	You are not going to go	You aren't going to go	Are you going to go?	(W) Elaborar una infografía sobre tu viaje ideal. (dónde, qué objetos a llevar y actividades a realizar).	Expresiones de tiempo/Time expressions: tomorrow, the day after tomorrow, next week, month, year, later, later in the week, in an hour, soon, in the near future.				(S) Hacer predicciones de viaje a un compañero con role-play de Fortune Teller.	Planes y vacaciones/Vacation Plans: C amp, b & b (bed and breakfast), motel, resort, camp site, excursion, hostel, destination, journey, holiday, passenger, route, tour, tourist, travel, trip, occupancy, front desk, concierge, beach, city, picnic, take photographs, pack, go camping, go sightseeing, booking, travel by (plane, car, bus, train, ship).				Metas personales y profesionales/ Personal and professional Goals: Verbs: work, study, travel, do a masters/ doctorate/ PhD, change job, go on an exchange program, plan, afford.																						Nouns: plan, objective, ambition, prediction, expectation, masters, doctorate/ PhD.							Objetos comunes para viaje/ Common Travel objects: bathing suit, sleeping bag, tent, insect repellent, first-aid kit, flashlight, batteries, towel, sandals, toiletries, sunscreen, razor, hair dryer, brush, comb, toothbrush, toothpaste, sunglasses, suitcase/ luggage, passport, visa, postcards, souvenirs, map, backpack, pictures, camera.					El medio ambiente: problemas y soluciones	Introducción al cero condicional y primer condicional	If clause+ consequence Cero condicional/ Zero conditional: If + present simple, present simple. Primer condicional/ First Conditional If + present simple, ... will + infinitive				(W) Ensayo sobre problemas con el medio ambiente (R) Leer sobre la problemática medioambiental global y presentar las ideas principales. (W) (S) Expresar de una manera verbal y escrita una propuesta de solución a la problemática ambiental en su contexto local.	Sobre el medio ambiente/ about the environment: water, overpopulation, pollution, contamination, smog, growth, economic investment, environment, global warming, reuse, reduce, recycle, landfill, renewable source, ecofriendly, ecosystems, biodegradable, extinction, waste, greenhouse effect, carbon foot print, organic, inorganic, solar energy.		
Futuros inciertos, promesas, predicciones/ Will																																																																																																																																															
Afirmativo	Negativo	Negativo contraído	Interrogativo	(S) Hablar de sus planes a realizar a corto y mediano plazo.																																																																																																																																											
I will go	I will not go	I won't go	Will I go?																																																																																																																																												
You will go	You will not go	You won't go	Will you go?																																																																																																																																												
She will go	She will not go	She won't go	Will she go?																																																																																																																																												
He will go	He will not go	He won't go	Will he go?																																																																																																																																												
It will go	It will not go	It won't go	Will it go?																																																																																																																																												
We will go	We will not go	We won't go	Will we go?																																																																																																																																												
You will go	You will not go	You won't go	Will you go?																																																																																																																																												
They will go	They will not go	They won't go	Will they go?																																																																																																																																												
Para cuando se ha realizado alguna acción cuyo resultado es evidente: Going to + verb (infinitive)				(L) Escuchar un blog o podcast de recomendaciones de viaje.																																																																																																																																											
	Expresiones de tiempo en futuro	<table><tr><th>Afirmativo</th><th>Negativo</th><th>Negativo contraído</th><th>Interrogativo</th></tr><tr><td>I am going to go</td><td>I am not going to go</td><td>I'm not going to go</td><td>Am I going to go?</td></tr><tr><td>You are going to go</td><td>You are not going to go</td><td>You aren't going to go</td><td>Are you going to go?</td></tr><tr><td>He is going to go</td><td>He is not going to go</td><td>He isn't going to go</td><td>Is he going to go?</td></tr><tr><td>She is going to go</td><td>She is not going to go</td><td>She isn't going to go</td><td>Is she going to go?</td></tr><tr><td>It is going to go</td><td>It is not going to go</td><td>It isn't going to go</td><td>Is it going to go?</td></tr><tr><td>We are going to go</td><td>We are not going to go</td><td>We aren't going to go</td><td>Are we going to go?</td></tr><tr><td>You are going to go</td><td>You are not going to go</td><td>You aren't going to go</td><td>Are you going to go?</td></tr></table>				Afirmativo	Negativo	Negativo contraído	Interrogativo	I am going to go	I am not going to go	I'm not going to go	Am I going to go?	You are going to go	You are not going to go	You aren't going to go	Are you going to go?	He is going to go	He is not going to go	He isn't going to go	Is he going to go?	She is going to go	She is not going to go	She isn't going to go	Is she going to go?	It is going to go	It is not going to go	It isn't going to go	Is it going to go?	We are going to go	We are not going to go	We aren't going to go	Are we going to go?	You are going to go	You are not going to go	You aren't going to go	Are you going to go?	(W) Elaborar una infografía sobre tu viaje ideal. (dónde, qué objetos a llevar y actividades a realizar).																																																																																																									
		Afirmativo	Negativo	Negativo contraído	Interrogativo																																																																																																																																										
		I am going to go	I am not going to go	I'm not going to go	Am I going to go?																																																																																																																																										
		You are going to go	You are not going to go	You aren't going to go	Are you going to go?																																																																																																																																										
		He is going to go	He is not going to go	He isn't going to go	Is he going to go?																																																																																																																																										
		She is going to go	She is not going to go	She isn't going to go	Is she going to go?																																																																																																																																										
		It is going to go	It is not going to go	It isn't going to go	Is it going to go?																																																																																																																																										
		We are going to go	We are not going to go	We aren't going to go	Are we going to go?																																																																																																																																										
		You are going to go	You are not going to go	You aren't going to go	Are you going to go?																																																																																																																																										
		Expresiones de tiempo/Time expressions: tomorrow, the day after tomorrow, next week, month, year, later, later in the week, in an hour, soon, in the near future.				(S) Hacer predicciones de viaje a un compañero con role-play de Fortune Teller.																																																																																																																																									
		Planes y vacaciones/Vacation Plans: C amp, b & b (bed and breakfast), motel, resort, camp site, excursion, hostel, destination, journey, holiday, passenger, route, tour, tourist, travel, trip, occupancy, front desk, concierge, beach, city, picnic, take photographs, pack, go camping, go sightseeing, booking, travel by (plane, car, bus, train, ship).																																																																																																																																													
		Metas personales y profesionales/ Personal and professional Goals: Verbs: work, study, travel, do a masters/ doctorate/ PhD, change job, go on an exchange program, plan, afford.																																																																																																																																													
		Nouns: plan, objective, ambition, prediction, expectation, masters, doctorate/ PhD.																																																																																																																																													
		Objetos comunes para viaje/ Common Travel objects: bathing suit, sleeping bag, tent, insect repellent, first-aid kit, flashlight, batteries, towel, sandals, toiletries, sunscreen, razor, hair dryer, brush, comb, toothbrush, toothpaste, sunglasses, suitcase/ luggage, passport, visa, postcards, souvenirs, map, backpack, pictures, camera.																																																																																																																																													
El medio ambiente: problemas y soluciones	Introducción al cero condicional y primer condicional	If clause+ consequence Cero condicional/ Zero conditional: If + present simple, present simple. Primer condicional/ First Conditional If + present simple, ... will + infinitive				(W) Ensayo sobre problemas con el medio ambiente (R) Leer sobre la problemática medioambiental global y presentar las ideas principales. (W) (S) Expresar de una manera verbal y escrita una propuesta de solución a la problemática ambiental en su contexto local.																																																																																																																																									
		Sobre el medio ambiente/ about the environment: water, overpopulation, pollution, contamination, smog, growth, economic investment, environment, global warming, reuse, reduce, recycle, landfill, renewable source, ecofriendly, ecosystems, biodegradable, extinction, waste, greenhouse effect, carbon foot print, organic, inorganic, solar energy.																																																																																																																																													



Geometría y Trigonometría

I. Figuras Geométricas

- 1.1 Conceptos geométricos no definidos (Punto, Línea, Semirrecta, Segmento, Curva, Arco, figura y Cuerpo geométricos)
- 1.2 Conceptos Geométricos definidos (Axioma, Postulado, Teorema, Corolario, Lema)
- 1.3 Ángulos
 - 1.3.1 Definición y notación de ángulos
 - 1.3.2 Sistemas de medida de ángulos (Sexagesimal, Radial y Conversiones).
 - 1.3.3 Clasificación de los ángulos de acuerdo con su medida.
 - 1.3.4 Pares de ángulos: complementarios, suplementarios, conjugados, opuestos por el vértice, adyacentes y consecutivos.
 - 1.3.5 Ángulos entre paralelas cortadas por una secante.
 - 1.3.6 Teoremas fundamentales y ejercicios prácticos contextualizados.
- 1.4 Triángulos
 - 1.4.1 Definición, notación y clasificación de triángulos
 - 1.4.2 Puntos, segmentos, líneas notables, ángulos interiores y exteriores
 - 1.4.3 Criterios de Congruencia y Semejanza
 - 1.4.4 Teoremas fundamentales de los triángulos (Herón, Tales y Pitágoras)
- 1.5 Cuadriláteros
 - 1.5.1 Definición, notación y clasificación de cuadriláteros
 - 1.5.2 Teoremas fundamentales y ejercicios prácticos contextualizados
- 1.6 Polígonos
 - 1.6.1 Definición, notación y clasificación de los polígonos
 - 1.6.2 Ángulos de un polígono (internos, externos, centrales)
 - 1.6.3 Líneas y segmentos de un polígono (lados, diagonales, radio, apotema)
 - 1.6.4 Perímetro y Áreas de polígonos (polígonos regulares e irregulares)
 - 1.6.5 Áreas de figuras combinadas
 - 1.6.6 Teoremas fundamentales y ejercicios prácticos contextualizados
- 1.7 Circunferencia y círculo
 - 1.7.1 Líneas, Segmentos y Ángulos notables en la circunferencia
 - 1.7.2 Perímetro y Áreas de figuras circulares
 - 1.7.3 Teoremas fundamentales y ejercicios prácticos contextualizados

II. Relaciones y funciones en el triángulo

- 2.1 Funciones Trigonométricas
 - 2.1.1 Funciones trigonométricas
 - 2.1.2 Funciones trigonométricas en el plano cartesiano (Círculo trigonométrico)
 - 2.1.3 Gráfica de las funciones trigonométricas
 - 2.1.4 Funciones trigonométricas de ángulos notables (30° , 45° y 60°) y sus múltiplos
 - 2.1.5 Funciones trigonométricas de los ángulos 0° , 90° , 180° , 270°
 - 2.1.6 Aplicación de las funciones trigonométricas (ejercicios contextualizados).



2.2 Resolución de triángulos

2.2.1 Triángulos Rectángulos (Teorema de Pitágoras y funciones trigonométricas).

2.2.2 Triángulo Oblicuángulo (Ley de Senos y Ley de cosenos)

2.3 Identidades trigonométricas

2.3.1 Básicas

2.3.2 Ecuaciones trigonométricas

2.4 Teoremas fundamentales y ejercicios prácticos contextualizados



Física I

I. La física y las unidades de medida

- 1.1 La física como ciencia
 - 1.1.1 Aportaciones de la física en el desarrollo científico y tecnológico.
 - 1.1.2 División de la física.
- 1.2 Mediciones
 - 1.2.1 Sistemas de unidades
 - 1.2.2 Magnitudes fundamentales y derivadas
 - 1.2.3 Conversión de unidades
 - 1.2.4 Trigonometría del Triángulo Rectángulo

II. Vectores

- 2.1 Características de un vector.
- 2.2. Magnitud escalar y vectorial.
- 2.3 Sistemas de vectores.
- 2.4 Operaciones con vectores
 - 2.4.1 Suma y resta de vectores por métodos gráficos.
 - 2.4.2 Suma y resta de vectores por métodos analíticos.

III. Estática

- 3.1 Objeto de estudio de la estática
- 3.2 Movimiento y par de fuerzas
- 3.3 Centroide, centro de gravedad y centro de masa
- 3.4 Diagrama de cuerpo libre
- 3.5 Máquinas simples
 - 3.5.1 Plano inclinado
 - 3.5.2 Palanca
 - 3.5.3 Cuña
 - 3.5.4 Poleas y arreglos
 - 3.5.5 Engranajes
 - 3.5.6 Torno
 - 3.5.7 Tornillos

IV. Cinemática

- 4.1 Conceptos y principios básicos
 - 4.1.1 Conceptos de posición, movimiento, rapidez, velocidad y aceleración.
 - 4.1.2 Sistemas de referencia
- 4.2 Movimiento de los cuerpos
 - 4.2.1 Movimiento rectilíneo uniforme y uniformemente acelerado
 - 4.2.2 Caída libre y tiro vertical
 - 4.2.3 Tiro horizontal y parabólico
 - 4.2.4 Movimiento circular



Taller de Lectura y Redacción I

I. MANEJO DE LA INFORMACIÓN

- 1.1 Estrategias de lectura y análisis: datos, hechos, opiniones, inferencias.
- 1.2 Confiabilidad de fuentes de información.
- 1.3 Análisis de textos informativos: qué, quién, cómo, cuándo, dónde, por qué, para qué, relación texto-para texto elementos no lingüísticos.
- 1.4 Nociones clave de las normas de estilo para la redacción.
- 1.5 Consulta de fuentes de información y obtención de datos de referencia.

II. ARGUMENTAR Y PERSUADIR

- 2.1 Estructura argumentativa.
- 2.2 Recursos argumentativos.
- 2.3 Propiedades de adecuación, coherencia y cohesión.
- 2.4 Relación entre argumentar y persuadir.

III. COMENTANDO Y CITANDO UN TEXTO

- 3.1 Análisis e interpretación de textos argumentativos: artículos de opinión, ensayos breves, libros académicos, publicidad gráfica o audiovisual.
- 3.2 Uso de citas textuales y no textuales.
- 3.3 Registro de fuentes de información en formatos estándar (MLA, APA, Chicago u otras).
- 3.4 Elaboración de reseñas indicando tema, ideas principales, palabras clave, estructura, punto de vista, y ficha bibliográfica.

IV. REDACCIÓN, ANÁLISIS Y DISCUSIÓN DE ENSAYOS

- 4.1 El ensayo: diferencia en la situación comunicativa del ensayo literario y del ensayo académico.
- 4.2 El ensayo literario y sus características: intención estética, originalidad, polémica, diálogo con el lector, lenguaje retórico, libertad temática, tono subjetivo, actitud crítica.
- 4.3 El ensayo académico y sus características: propósito, argumentos, conclusión, aparato crítico.
- 4.4 Elaboración de ensayos: problematización de un tema, uso de citas, referencias.

V. COMUNICACIÓN ORAL

- 5.1 Estrategias para la elaboración del discurso oral: comunicación verbal y no verbal, preparación de medios tecnológicos y audiovisuales de apoyo, consideraciones de tiempo y lugar.
- 5.2 Organización de exposiciones individuales o en equipo.
- 5.3 Organización de debates: estructura (tema, finalidad, roles, escenario, apertura y cuerpo del debate, sesión de preguntas y respuestas, conclusiones), recursos (prosodia, Lexicalización formal, Ejemplos, Preguntas retóricas, Anticipación, Argumentación) y actitudes y valores.



México Contemporáneo

I. México y el porfirismo

- 1.1 José de la Cruz Porfirio Díaz Mori
- 1.2 El país en el porfirismo

II. México en Revolución

- 2.1 Los caudillos, sus ideas y propósitos
- 2.2 La sociedad revolucionaria

III. México y sus gobiernos postrevolucionarios

- 3.1 La postrevolución en el país
- 3.2 Los cristeros
- 3.3 Lázaro Cárdenas
- 3.4 La política y los gobiernos

IV. Configuración político-económica del México contemporáneo

- 4.1 Antecedentes y surgimiento del Estado Benefactor
- 4.2 Modelos de desarrollo económico
- 4.3 México neoliberal



Para consulta detallada de los temas y bibliografía ingrese a: <http://www.colegionms.ugto.mx/2013-09-30-18-37-02/programa-general-plan-2020> y consulte los programas de tercer semestre.

