



TEMARIO

POSGRADO EN CIENCIAS BIOLÓGICAS

**UNIVERSIDAD NACIONAL AUTÓNOMA DE MÉXICO
PROGRAMA DE POSGRADO EN CIENCIAS BIOLÓGICAS**

Denominación de la actividad académica (completa): Temas selectos. Ecología de helmintiasis en vertebrados silvestres

Clave: (no llenar)	Semestre: (indicar el semestre o semestres en los que se impartirá la actividad) 2024-2	Campo de conocimiento: (indicar el campo o campos en los que se ubica la actividad) Biología Evolutiva Ecología Sistemática	Número de Créditos: (indicar el número de créditos – cada 8 horas teóricas o prácticas al semestre equivale a 1 crédito (Ejem. Si son 64 horas al semestre son 8 créditos. Nota: Cada semestre tiene 16 semanas): 8)
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Carácter (es decir si la actividad académica es obligatoria, optativa, obligatoria de elección u optativa de elección) Optativa	Horas		Horas por semana	Horas por semestre
	Teóricas 32	Prácticas 32	4	64

Modalidad Curso, teórico- práctico (cómputo)	Duración del curso Semestral
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Seriación indicativa u obligatoria antecedente, si es el caso:

Seriación indicativa

Seriación indicativa u obligatoria subsecuente, si es el caso:

Seriación indicativa

Objetivo general:

El alumno aprenderá los métodos y técnicas propuestas para el análisis ecológico de las helmintiasis en vertebrados silvestres.

Objetivos específicos: (en si caso)

- Revisar los aspectos teóricos básicos sobre ecología de helmintos de animales silvestres.
- Manejar las técnicas que más comúnmente se emplean para recabar y analizar datos en helmintología.
- Aplicar las técnicas y metodologías para la resolución de problemas en la ecología de helmintos.

Temario	Horas	
	Teóricas	Prácticas
Unidad 1 Generalidades de helmintos. 1.1. Morfología. 1.2. Ciclos de vida. 1.3. Estrategias reproductivas. 1.4. Estrategias de colonización y transmisión. 1.4.1. Consecuencias evolutivas.	4	
Unidad 2 Conceptos generales en ecología de helmintiasis 2.1. Definiciones a nivel de población: infrapoblación, componente de población, gremio de población y suprapoblación.	2	2
Unidad 3		



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Caracterización de infecciones por helmintos. 3.1. Diseño del muestreo. 3.2. Parámetros poblacionales para caracterizar las infecciones por helmintos.	2	2
Unidad 4 <i>Poblaciones</i> 4.1. Estudios de laboratorio y campo	4	4
Unidad 5 Factores bióticos y abióticos que afectan a las poblaciones de helmintos. 5.1. Densodependencia. 5.2. Influencia de la edad, talla, sexo y grado de madurez de los hospederos sobre las poblaciones de helmintos. 5.3. Importancia de la temperatura, el clima y otros factores para la densidad poblacional de los helmintos. 5.4. Sobrepopulación. 5.5. Competencia.	4	4
Unidad 6 Infracomunidades. 6.1. Definiciones a nivel de comunidad: infracomunidad, componente de comunidad, gremio de comunidad y supracomunidad. 6.2. Curvas de acumulación de especies. 6.3. Curvas de rarefacción. 6.3. Atributos: riqueza, abundancia, diversidad, equidad y dominancia. 6.4. Similitud.	4	6
Unidad 7 Componente de comunidad. 7.1 Atributos: riqueza, abundancia, diversidad, equidad y dominancia. 7.2. Composición. 7.3. Similitud.	4	6
Unidad 8 Comunidad compuesta. 8.1. Conceptos. 8.2. Complejidad.	2	4
Unidad 9 Especificidad hospedatoria e intercambio de helmintos.	2	
Unidad 10 Aspectos biogeográficos. 10.1. Factores que afectan la distribución geográfica de los parásitos. 10.2. Patrones de distribución. 10.3. Origen y evolución de los parásitos y sus hospederos.	4	4
Total de horas teóricas	32	
Total de horas prácticas		32
Suma total de horas (debe coincidir con el total de horas al semestre)	64	
Bibliografía básica		
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Sugerencias didácticas:

(marcar con una X la sugerencia didáctica que se utilizará para abordar los temas. Es importante tomar en cuenta que si la actividad tiene horas prácticas en las sugerencias deberá haber herramientas prácticas para el aprendizaje de los temas)

- Exposición oral
 Exposición audiovisual
 Ejercicios dentro de clase
 Ejercicios fuera del aula
 Seminarios
 Lecturas obligatorias

Mecanismos de evaluación del aprendizaje de los alumnos:

(marcar con una X el mecanismo que se utilizará para evaluar el aprendizaje. Se recomienda que para la evaluación sean tomadas en cuenta las sugerencias didácticas señaladas)

- Exámenes parciales
 Examen final escrito
 Tareas y trabajos fuera del aula
 Exposición de seminarios por los alumnos
 Participación en clase
 Asistencia
 Seminario
 Otros (indicar cuáles)



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<p><input checked="" type="checkbox"/> Trabajos de investigación <input type="checkbox"/> Prácticas de taller o laboratorio <input type="checkbox"/> Prácticas de campo <input type="checkbox"/> Otros (<i>indicar cuáles</i>)</p>	
<p>Línea de investigación: Sistemática, evolución y biogeografía de helmintos</p>	
<p>Perfil profesiográfico El curso es para todos aquellos estudiantes que se estén formando en áreas de conocimiento en la investigación de asociaciones biológicas, en especial el parasitismo.</p>	