

**Docente:** Bruce D. Marron  
**Ciclo:** 25-2  
**Materia:** Terminología Especializada en Documentos de Tecnología e Ingeniería  
**Curso:** IT0627  
**Licenciatura:** Interpretación y Traducción  
**Horario:** Jueves 16:00 – 19:00  
**Grupo:** 6A2

### HW\_07.1 Information Theory Rubric (convert to 10 point scale)

Criteria	Excellent	Acceptable	Poor
<b>Summary / Reading Comprehension (Task 1)</b>	Provides a comprehensive, well-structured summary of both MacKay excerpts with clear main ideas, demonstrating deep understanding and critical analysis	Offers a basic summary of the excerpts with some key points, but lacks depth or comprehensive insight	Minimal or superficial summary that fails to capture the core concepts of the texts
<b>Terminology Translation (Task 2)</b>	Accurately defines all 64 terms in both English and Spanish, showing precise understanding and linguistic precision	Defines most terms correctly, with minor inaccuracies or incomplete translations	Provides limited or incorrect definitions across multiple terms
<b>Writing Quality, Accuracy, and Presentation</b>	Exhibits exceptional technical accuracy in scientific and mathematical terminology, showing deep understanding of information theory concepts	Displays general technical understanding with some minor inaccuracies	Shows significant gaps in technical understanding and precise terminology

### Assignment

HW\_07.1 [Due: 27 Mar 2025]

The standard format applies ONLY to Task 1.

--- Task 1

Read the following two excerpts from Sir David MacKay's, "Information Theory, Inference, Learning Algorithms,"

- i) MacKay\_Sex.pdf
- ii) MacKay\_CodeBreaking.pdf

Do your best to get the gist (main ideas) of each excerpt and write a summary of each excerpt in English.

--- Task 2

Define the following terms in both English and Spanish. Add any new words to your dictionary.

## TERMS (64)

allele  
alpha, beta, gamma, delta  
asexual reproduction  
asymmetrical  
Bayesian statistics  
bigram  
binary  
camouflaged  
catalyst  
code breaking  
collating  
conjecture  
constraint  
crossover  
cypher  
deleterious  
deterministic  
differential  
diploid  
Dirichlet process  
discernible  
DNA  
ecosystem  
empirical  
emulate  
enzymatic  
eugenic  
false-negative  
false-positive  
fitness (evolution)  
Gaussian distribution  
genome  
genotype  
haploid  
histogram  
homogeneous  
logarithm  
Mandelbrot set  
mutation  
nonlinear

nucleotide  
parameter  
parthenogenesis  
permutation  
phenotype  
precursor  
probability  
probability distribution  
progeny  
qualitative  
quantitative  
quantized  
recombination (genetics)  
self-replicating  
sexual reproduction  
spurious  
statistics  
symmetry  
synchronized  
transcription (genetics)  
translation (genetics)  
trigram  
unicellular