## **LECON2112 Advanced Microeconomics II**

- Assignment 9 -

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Deadline: Monday, April 29, 2024 at 5pm.

**Instructions:** To be submitted via Moodle as a single

file (including your name and NOMA).

## Exercises<sup>1</sup>

**11Ba.** We have two agents (1 and 2). We also have two goods, one private good in which both have an endowment ( $w_1$  and  $w_2$ , respectively) and pollution. Their utility functions are  $u_1 = x_1 + (-(h-5)^2)$  and  $u_2 = x_2 - h$  where x is the amount of the private good they enjoy and h the amount of pollution they experience. 1 is the one choosing the level of h.

(a) What will happen if only the private good is transferable from one agent to the other? Is it Pareto efficient?

<sup>&</sup>lt;sup>1</sup>Source: Mas-Colell, Whinston, & Green, 1995. "Microeconomic Theory," Oxford University Press.