

■ **Table 12.3:** An Example of Expected Utility Calculations for the Decision to Major in Selected Subjects

Major	Probability of Success	Utility		Expected Utility
		For Success	For Failure	
Art	.75	10	0	7.50
Asian studies	.50	0	-5	-2.50
Biology	.30	25	5	11.00
Chemistry	.45	30	4	15.70
Cognitive Science	.60	35	-20	13.00
Economics	.15	5	-10	-7.75
English	.25	5	0	1.25
French	.60	0	-5	-2.00
German	.50	0	-5	-2.50
History	.25	8	0	2.00
Mathematics	.05	10	5	5.25
Philosophy	.10	0	-5	-4.50
Physics	.01	0	0	0.00
Religion	.50	5	-5	0.00
Sociology	.80	5	-25	1.00

Note: The probability of each outcome (success and failure) is multiplied by the utility for each outcome and summed across both, giving the overall expected utility of choosing that major. Probabilities and utilities come from the individual making the decision and are subjective estimates.