

## ECON 251 HOMEWORK SCHEDULE\*

HOMEWORK	DATA	TOPICS COVERED	POSTED	DUE
PS#1	No dataset needed	<b>THEORY (STATISTICAL REVIEW):</b> <ul style="list-style-type: none"> <li>- Properties of expected value, variance and covariance</li> <li>- Properties of summations</li> </ul>	Week 1	Week 2
PS#2	WAGE2.dta	<b>EMPIRICAL:</b> <ul style="list-style-type: none"> <li>- Using STATA for data analysis (sample mean, max, min &amp; variable relations)</li> </ul> <b>THEORY (STATISTICAL REVIEW):</b> <ul style="list-style-type: none"> <li>- Populations, samples; population mean estimators and properties</li> </ul>	Week 2	Week 4
PS#3	WAGE2.dta	<b>EMPIRICAL:</b> <ul style="list-style-type: none"> <li>- Testing hypotheses about two population parameters</li> </ul> <b>THEORY (SIMPLE LINEAR REGRESSION):</b> <ul style="list-style-type: none"> <li>- Parameter interpretation</li> <li>- Algebra of OLS</li> </ul>	Week 3	Week 5
PS#4	WAGE2.dta	<b>MULTIPLE LINEAR REGRESSION:</b> <ul style="list-style-type: none"> <li>- Parameter interpretation</li> <li>- Goodness of fit</li> <li>- Omitted variable bias</li> <li>- Algebra of OLS</li> </ul>	Week 5	Week 7
PS#5	BEAUTY.dta	<b>MULTIPLE LINEAR REGRESSION WITH QUALITATIVE DATA:</b> <ul style="list-style-type: none"> <li>- MLR with a dummy variable</li> <li>- Models with interaction terms</li> </ul>	Week 8	Week 10
PS#6	BEAUTY.dta	<b>MULTIPLE LINEAR REGRESSION WITH QUALITATIVE DATA (CONTINUED):</b> <ul style="list-style-type: none"> <li>- Dummy variable regression</li> <li>- Testing hypotheses about more than one parameter</li> </ul>	Week 9	Week 11
PS#7	TRAFFIC2.dta CARD.dta	<b>TIME SERIES MODELS:</b> <ul style="list-style-type: none"> <li>- Trends and seasonality</li> <li>- Omitted variable bias (time trend)</li> </ul> <b>FUNCTIONAL FORM:</b> <ul style="list-style-type: none"> <li>- Models in quadratics</li> </ul>	Week 10	Week 12
PS#8	STAR.dta CARD.dta	<b>RANDOM EXPERIEMENTS:</b> <ul style="list-style-type: none"> <li>- The TENNESSEE STAR project</li> </ul> <b>INSTRUMENTAL VARIABLE ESTIMATION:</b> <ul style="list-style-type: none"> <li>- Using near college as an IV for education</li> </ul>	Week 11	Week 13

\*Dates are tentative and subject to change.