

PLOTS FOR ELEC1601 DATA

VARIABLES VS GRADES CORRELATION

MAJOR

-> **No of topics accessed** at the appropriate week or before
vs their grades
for each student

Goal: if this hypothesis turns out to be true then as the course progresses tutors could identify students slacking off and provide them counselling

-> **Time spent browsing** (all videos added up) in ratio (all video lengths added up)
vs. their grades
for each student

Calculation: Calculating time spent for every video for each student. Time spent is calculated by subtracting the play pause intervals for a given video and then adding them up

Goal: Shows the level of engagement by students correlating with grades

MINOR

-> **No of videos (loaded) accessed** out of the total 13
vs their grades
for each student

Goal: shows the level of engagement of student correlating with grades

-> **No of videos (ended) viewed completely** out of the total 13
vs. their grades
for each student

Goal: shows the level of engagement of student correlating with grades

-> **The frequency of video week number** accessed during the exam period
vs their grades
for each student

Calculation: (frequency*video week number) vs grades

Goal: shows that student has not studied material from earlier weeks

-> **The frequency of video week number** accessed overall with weightings for topic importance in each video
vs their grades
for each student

Calculation: (frequency*video week number)*weighting vs grades

Goal: shows that student has not studied material from earlier weeks

-> **Time of day videos** watched on an average
vs. their grades
for each student

Goal: Night Owls vs Early Birds

VARIABLES VS WEEK

MAJOR

-> **Time spent browsing** (all videos added up) in ratio (all video lengths added up)
for each topic

Calculation: calculating time spent for every video for each topic. Time spent is calculated by subtracting the play pause intervals for a given video and then adding them up

Goal: Shows the difficulty level of a topic

-> **Distribution of the time of day** videos watched on an average

Goal: Shows what time students are most productive

-> **Distribution of topics watched** over the entire semester

Calculation: Each topic spread placed on the same

MINOR

-> **Topics repeatedly loaded** showing their difficulty

Goal: Shows the difficulty level of a topic

-> **Topics watched during exam (loaded)** period showing importance