جامعة الحمدانية
كلية التربية
قسم الرياضيات

المادة: إحصاء رياضي
المرحلة: الرابعة
عدد الساعات:4 ساعات
عدد الوحدات: 6 وحدات

| ت | المفردات الدراسية | عدد الأسابيع |
|---|---|---|
| 1 | **Some important distribution s**<br>Introduction-discrete probility distribution and its related – continuous probability distribution and its related – relations between the distribution(t) and distribution(f) with statistical tables | |
| 2 | **Random sampling and sampling distribution**<br>Introduction-sample mean-central limit theorem – sample variance- sampling from normal proportion –distribution of the sample p proportion –distribution of order statistics and application . | |
| 3 | **Point estimation theory**<br>Introduction –(general concepts and definitions )-properties of good point estimator –unbiased ness-consistency (closeness)-efficiency-mean square error-sufficient-rao Blackwell theorem –fisher-Nyman Criterion-completeness-uniqueness –rao-cramer-methods of estimation –maximum likelihood method –moments method –least square method and Bayesian method | |
| 4 | **Interval estimation theory**<br>Introduction (general concepts and definition –concepts and definitions)-confidence interval for means –confidence interval for portions for large samples –confidence interval for normal distribution. | |
| 5 | **Test of Hypothesis**<br>Introduction (general concepts and definitions)-simple Hypothesis verus simple Alternation –composite Hypothesis –Test of Hypothesis –sample from the normal distribution-critical Region-Type I and TypeII Errors-power of the test –significance level of the Test (size of the critical Ragion)-Neyman –pearson Theorem –likehood Ratio test (construction best critical Region) –sequential test of Hypothesis AND Hypothesis Test about population mean. | |