

# An Introduction to Bayesian Analysis-2019 (MTH-535A)

In this semester we will be having around 35 lectures. Our classes are on Monday, Wednesday and Friday from 9:00 am to 9:50 am in L-13.

We will be mainly using the following books:

1. J.K. Ghosh, M. Delampady and T. Samanta (2006), An Introduction to Bayesian Analysis; Theory and Methods, Springer.
2. T.S. Ferguson (1967) Mathematical Statistics, A Decision Theoretic Approach, Academic Press.
3. J. O. Berger (1985) Statistical Decision Theory and Bayesian Analysis, 2nd edition, Springer.

The course will be evaluated by four quizzes, one mid-term and one final examination. The four quizzes will take place (a) January 23, 2019, (b) February 13, 2019, (c) March 13, 2019 and (d) April 03, 2019. All the quizzes will take place in the evening from 6:30 pm to 7:00 pm. If any body misses one quiz, then it will be replaced by the minimum marks of the other three quizzes, and if any body misses more than one quiz it/they will be replaced by 0. If anybody takes all the four quizzes, then the minimum will be replaced by the third highest among the four. I will be giving assignments in regular intervals. The final grade will be based on: Quiz (30%), Mid-Sem (30%), Final (40%). If I see any copying (or any unfair means) in any quiz, mid-sem or in final, all the concerned person(s) will be deregistered immediately and the matter may be reported to SSAC.

In this course three major areas will be covered.

1. Decision Theory.
2. Bayesian Theory.
3. Bayesian Computation.