

Agenda for CSCE 582 (=STAT 582) class meeting of 2021-04-08 (Class 24: 2 of Week 13; Online)

1. Remember to record the session!

WEEK	TOPIC	SOURCE
1 (1/12,14)	Probability and Reasoning	Chs.1 and 2 [J]; instructor's slides
2 (1/19,21)	Probability and Reasoning	Chs.1 and 2 [J]; instructor's slides
3 (1/26,28)	<i>Probability and Reasoning; Causal and Bayesian Networks</i>	<i>Chs.1 and 2 [J]; instructor's slides</i>
4 (2/2,4)	Causal and Bayesian Networks	Ch.2 [J]; instructor's slides
5 (2/9,11)	<i>Casual and Bayesian Networks; Building Models: Capturing the Structure and Determining the Conditional Probabilities</i>	<i>Instructor's Slides; Sections 3.1 & 3.2 [J]</i>
6 (2/16,18)	Building Models: Capturing the Structure and Determining the Conditional Probabilities	Sections 3.1, 3.2 and 3.3 [J] and notes on the stratum method
7(2/23,25)	Building Models: Capturing the Structure and Determining the Conditional Probabilities; Advanced Modeling Methods and Special Features; Wellness Holiday	Sections 3.2, 3.3 and 3.4 [J] and notes on the stratum method
8 (3/2,4)	<i>Building Models: Capturing the Structure and Determining the Conditional Probabilities; Building Models: Advanced Modeling Methods and Special Features;</i>	<i>Sections 3.2, 3.3 and 3.4 [J]</i>
9 (3/9,11)	<i>Building Models: Capturing the Structure and Determining the Conditional Probabilities Review (if time permits) and Midterm</i>	<i>Sections 3.2, 3.3 and 3.4 [J]</i>
10 (3/16,18)	<i>Building Models: Determining the Conditional Probabilities; Advanced Modeling Methods and Special Features;-Belief Updating in Bayesian Networks: The Junction Tree Method</i>	<i>Sections 3.3 and 3.4 [J]; Ch.4 [J96] & Ch. 4 [J]</i>
11 (3/23,25)	<i>Advanced Modeling Methods and Special Features;-Belief Updating in Bayesian Networks: The Junction Tree Method Belief Updating in Bayesian Networks: Stochastic Simulation and Loopy Belief Propagation</i>	<i>Sections 3.3 and 3.4 [J]; Ch.4 [J96] & Ch. 4 [J]. Sections 4.7-4.8 [J] & Section 4.6 [J96]</i>
12 (3/30 & 4/1)	Wellness Holiday. <i>Belief Updating in Bayesian Networks: The Junction Tree Method. Belief Updating in Bayesian Networks: Stochastic Simulation and Loopy Belief Propagation. Graphical Languages for Decision Problems</i>	<i>Sections 3.3 and 3.4 [J]; Ch.4 [J96] & Ch. 4 [J]. Sections 4.7-4.8 [J] & Section 4.6 [J96]. Ch.9 [J]</i>
13 (4/13,15)	<i>Belief Updating in Bayesian Networks: The Junction Tree Method. Belief Updating in Bayesian Networks: Stochastic Simulation and Loopy Belief Propagation. Graphical Languages for Decision Problems Graphical Languages for Decision Problems</i>	<i>Ch.4 [J96] & Ch. 4 [J]. Sections 4.7-4.8 [J] & Section 4.6 [J96]. Ch.9 [J]</i>
14 (4/20,22)	Graphical Languages for Decision Problems	Ch.9 [J]
15 (4/20,22)	Review (if time permits) and Graduate Student Presentations	
May 4	Final Exam: May 4, 12:30 p.m.	

- Check email to see whether students are emailing reports of trouble.
- Ask student to use chat for questions and mute audio and video on their side, to limit clutter and bandwidth.
- Virtual Office Hours. I expect to have virtual office hours on Blackboard Collaborate Ultra from 1500-1800 on Mondays. Please email me if you want to meet me online.
- HW4 assigned, due 2021-02-18 (Thursday): Install Hugin or learn how to access it on the departmental Linux machines or on the remote CEC Windows lab. See the "Access and Resources" tab at <https://internal.cec.sc.edu/its/> for instructions on how to access the remote CEC Windows Lab. Older versions of Hugin are available through the Content section of Blackboard for the course. The new version is available on the departmental lab machines and on the CEC Windows lab.
- HW6 assigned (note changes), due 2021-03-23 (Tuesday): Exercises 3.10, 3.12, 3.13 (parts i-iii only) [J].
- HW7 assigned: Exercises 3.16, 3.21 (ii; estimate the probabilities using the Noisy-Or assumption only), 3.7, 3.29 [J], due 2021-04-13.
- For graduate credit: please choose presentation/report/reconstruction. Email me your proposal with "582 Graduate Work" in the subject line.
- Models: Belief updating in Bayesian networks: the junction tree method; stochastic simulation.
- Make sure that the students are fine and wait for questions before ending the session.