<table>
<tr><td>Course Name</td><td colspan="3">Big Data</td><td>Course Code</td><td colspan="3">COMP 457</td></tr>
<tr><td rowspan="2">Credit Hours</td><td colspan="3" rowspan="2">3</td><td rowspan="2">Contact Hours</td><td>Theory</td><td>Lab</td><td>Total</td></tr>
<tr><td>2</td><td>2</td><td>4</td></tr>
<tr><td>Offered as</td><td colspan="7">☐ University Requirement ☐ College Requirement ☒ Program Requirement ☒ Core ☒Elective
☐ ITEC ☒ COMP ☐ CNET</td></tr>
<tr><td>Level</td><td colspan="3">8</td><td>Prerequisite</td><td colspan="3">NIL</td></tr>
<tr><td colspan="8">Course Description:
Today’s world is data-driven world. Increasingly, the efficient operation of organizations across sectors relies on the effective use of vast amounts of data. This course provides grounding in basic and advanced analytic methods and an introduction to big data analytics technology and tools, including MapReduce and Hadoop</td></tr>
<tr><td colspan="8">Course objectives:
♦ Understand the Big Data Platform and its Use cases
♦ Provide an overview of Apache Hadoop
♦ Provide HDFS Concepts and Interfacing with HDFS
♦ Provide hands on Hadoop Eco System
♦ Apply analytics on Structured, Unstructured Data.
♦ Exposure to Data Analytics with R.</td></tr>
<tr><td rowspan="2">Grading</td><td>☒ Exam 1</td><td>10%</td><td>☒ Exam 2</td><td>10%</td><td>☒ Assignment(s)</td><td>20%</td></tr>
<tr><td>☒ Final</td><td>40%</td><td>☒ Lab</td><td>20%</td><td>☐ Mini Project</td><td></td></tr>
<tr><td colspan="8">Text Book:
♦ Dr. Charles Russell Severance (Author), Sue Blumenberg (Editor), Elliott Hauser (Editor), Aimee Andrion (Cover Design), “Python for Everybody: Exploring Data in Python 3”, 2nd Edition, ISBN-13: 978-1530051120, 2016.
♦ Seema Acharya, Subhasini Chellappan, First Edition "Big Data Analytics" Wiley 2015. ISBN-13: 978-8126554782</td></tr>
<tr><td colspan="8">References:
♦ Michael Berthold, David J. Hand, "Intelligent Data Analysis”, Springer, 2007.
♦ Jay Liebowitz, “Big Data and Business Analytics” Auerbach Publications, CRC press (2013)
♦ Anand Rajaraman and Jef rey David Ulman, “Mining of Massive Datasets”, Cambridge University Press, 2012.</td></tr>
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