Task1.

In BCNF, every non-prime attribute should be functionally dependent on any of super key in schema. If there exists any FD, which do not follow this, then for that case we have to separate it into new relation. Now if any of other FD uses previous FD, then this creates non presentation of FD in BNCF.

Task2.

UnitID	TutorID	Topic	Room	Date
U1	Tut1	GMT	629	23.02.03
U2	Tut3	Gln	631	18.11.02
U1	Tut1	GMT	629	23.02.03
U5	Tut3	PhF	632	05.05.03
U4	Tut5	AVQ	621	04.07.03

StudentID	**UnitID**	Grade
St1	U1	4.7
St1	U2	5.1
St4	U1	4.3
St2	U5	4.9
St2	U4	5.0

TutorID	TutEmail
Tut1	tut1@fhbb.ch
Tut3	tut3@fhbb.ch
Tut5	tut5@fhbb.ch

Topic	Book
GMT	Deumlich
Gln	Zehnder
PhF	Dummlers
AVQ	SwissTopo

Task3.

ProjectName	**ProjectManager**	TeamSize	Budget
Project1	Manager1	15	1 kk $
Project2	Manager2	12	1.5 kk $

ProjectManager	Position
Manager1	CTO
Manager2	CTO2

Task4.

Group	Specialty
g1	s1
g2	s2

Specialty	Faculty
s1	f1
s2	f2

Task5.

ProjectID	**Department**
p1	d1
p2	d2

ProjectID	Curator	TeamSize
p1	e1	100
p2	e2	120

TeamSize	ProjectGrouosNumber
100	5
120	6

Task6.

The three design goals are lossless-join decompositions, dependency preserving decompositions, and minimization ofrepetition of information. They are desirable so we can maintain an accurate database, check correctness of updates quickly, and use the smallest amount of space possible.