Staffing:

UNF:
CLASS(centre_id, centre_name, centre_street, centre_town, centre_pc, class_no, class_dur, facility_rm_no, start_datetime, no_of_session, (staff_id, staff_name, class_leader, first_aid_cert))

1NF:

CLASS (centre_id, class_no, centre_name, centre_street, centre_town, centre_pc, class_dur, facility_rm_no, start_datetime, no_of_session)

CLASS_STAFF(centre_id, class_no, staff_id, staff_name, class_leader, first_aid_cert)

Partial dependency:
centre_id -> centre_name, centre_street, centre_town, centre_pc
staff_id -> staff_name

2NF:
CLASS (centre_id, class_no, class_dur, facility_rm_no, start_datetime, no_of_session)
CENTRE(centre_id, centre_name, centre_street, centre_town, centre_pc)
CLASS_STAFF(centre_id, class_no, staff_id, class_leader, first_aid_cert)
STAFF(staff_id, staff_name)

Transitive dependency:
No transitive depedency

3NF:
CLASS(centre_id, class_no, class_dur, facility_rm_no, start_datetime, no_of_session)
CENTRE(centre_id, centre_name, centre_street, centre_town, centre_pc)
CLASS_STAFF (centre_id, class_no ,staff_id, class_leader, first_aid_cert)
STAFF(staff_id, staff_name)

Full dependency:
centre_id, class_no -> class_dur, facility_rm_no, start_datetime, no_of_session
centre_id -> centre_name, centre_street, centre_town, centre_pc
centre_id, class_no, staff_id -> class_leader, first_aid_cert
staff_id ->staff_name,

Attendance:

UNF:

CLASS (centre_id, centre_name, class_no, class_type, class_desc, facility_rm_no, start_datetime, no_of_session, (member_no, payment_date, (session_date, session_attend), total_attend))

1NF:

CLASS(<u>centre_id</u>, <u>class_no</u>, centre_name, class_type, class_desc, facility_rm_no, start_datetime, no_of_session)
ATTENDANCE(<u>centre_id, class_no, member_no</u>, payment_date, total_attend)
SESSION(<u>centre_id</u>, <u>class_no,</u> <u>member_no,</u> <u>session_date</u>, session_attend)

Partial dependency:
centre_id -> centre_name

2NF:

CLASS (<u>centre_id</u>, <u>class_no</u>, class_type, class_desc, facility_rm_no, start_datetime, no_of_session)
CENTRE(<u>centre_id,</u> centre_name)
ATTENDANCE(<u>centre_id, class_no, member_no</u>, payment_date, total_attend)
SESSION(<u>centre_id</u>, <u>class_no,</u> <u>member_no,</u> <u>session_date</u>, session_attend)

Transitive dependency:
No Transitive dependency

3NF:
CLASS (<u>centre_id</u>, <u>class_no</u>, class_type, class_desc, facility_rm_no, start_datetime, no_of_session)
CENTRE(<u>centre_id,</u> centre_name)
ATTENDANCE(<u>centre_id, class_no, member_no</u>, payment_date, total_attend)
SESSION(<u>centre_id</u>, <u>class_no,</u> <u>member_no,</u> <u>session_date</u>, session_attend)

Full dependency:

centre_id, class_no -> class_type, class_desc, facility_rm_no, start_datetime, no_of_session
centre_id -> centre_name
centre_id, class_no, member_no -> payment_date, total_attend
centre_id, class_no, member_no, session_date -> session_attend

Collected 3NF:

1. CLASS(centre_id, class_no, class_dur, facility_rm_no, start_datetime, no_of_session)
2. CENTRE(centre_id, centre_name, centre_street, centre_town, centre_pc)
3. CLASS_STAFF (centre_id, class_no ,staff_id, class_leader, first_aid_cert)
4. STAFF(staff_id, staff_name)
5. CLASS (centre_id, class_no, class_type, class_desc, facility_rm_no, start_datetime, no_of_session)
6. CENTRE(centre_id, centre_name)
7. ATTENDANCE(centre_id, class_no, member_no, payment_date, total_attend)
8. SESSION(centre_id, class_no, member_no, session_date, session_attend)

Attribute Synthesis: group all relation with same pk:

1 & 5

CLASS (centre_id, class_no, class_dur, class_type, class_desc, facility_rm_no, start_datetime, no_of_session)

2 & 6

CENTRE(centre_id, centre_name, centre_street, centre_town, centre_pc)
CLASS_STAFF (centre_id, class_no ,staff_id, class_leader, first_aid_cert)
STAFF(staff_id, staff_name)
ATTENDANCE(centre_id, class_no, member_no, payment_date, total_attend)
SESSION(centre_id, class_no, member_no, session_date, session_attend)