RESISTANCE EXERCISE WITH MACHINES Beginner phase I (weeks 1-8)**		
50-60% of 1 RM; 2x/week 1-2 weeks: Familiarization phase		
Body Part	Exercise	Sets x Reps
Chest	Chest press (machine seated or lying)	1 x 12-15
Back	Seated Cable Row https://www.youtube.com/watch?v=xQNrFHEMhI4	1 x 12-15 1 x 12-15
	Seated Cable Pull Down https://www.youtube.com/watch?v=X5n55mMqSUs&vl=en	1 x 12-13
Arms	Biceps curl (seated machine)	1 x 12-15
	Triceps extension (seated machine)	1 x 12-15
Shoulders	Overhead press (seated machine)	1 x 12-15
Upper Legs	Leg extension (seated machine)	1 x 12-15
	Leg Curl (seated machine)	1 x 12-15
Lower legs	Calf raise (seated machine)	1 x 12-15
	https://www.youtube.com/watch?v=JbyjNymZOt0	1 x 12-15
	Calf rise (standing) https://www.youtube.com/watch?v=gwLzBJYoWII	
Rest between sets:	2 minutes as needed Total sets	= 10

Beginner phase II (weeks 1-8)**		
60-69% of 1 RM; 2x/week 3-8 weeks		
Body Part	Exercise	Sets x Reps
Chest	Chest press (machine seated or lying)	1 x 12-18
	Wall push-up https://www.youtube.com/watch?v=JJg2Avvd5WY	1 x 12-18
Back	Seated Cable Row	1 x 12-18
	Seated Cable Pull Down	1 x 12-18
Arms	Biceps curl (seated machine)	1 x 12-18
	Triceps extension (seated machine)	1 x 12-18
Shoulders	Overhead press (seated machine)	1 x 12-18
Upper Legs	Leg extension (seated machine)	1 x 12-18
	Leg Curl (seated machine)	1 x 12-18
Lower legs	Calf raise (seated machine)	1 x 12-18
	Calf rise (standing)	1 x 12-18
Rest between sets: 90 seconds Total sets = 11		= 11

https://www.youtube.com/watch?v=Y2ZTbhb-d4Q contains the following machine exercises: Leg extension; Seated leg curl; seated leg press; lat pull down; shoulder press; chest press; bicep curl; pec fly; rear delt fly

	Intermediate phase I (weeks 9-24)**	
9% of 1 RM; 2x/wee	ek	9-16 weeks
Body Part	Exercise	Sets x Reps
Chest	Chest press (machine seated or lying)	2 x 12-18
	Wall push-up	2 x 12-18
	Chest Flye (machine)	2 x 12-18
	https://www.youtube.com/watch?v=Z57CtFmRMxA	
Back	Seated Cable Row	2 x 12-18
	Seated Cable Pull Down	2 x 12-18
Arms	Biceps curl (seated machine)	2 x 12-18
	Triceps extension (seated machine)	2 x 12-18
Shoulders	Overhead press (seated machine)	2 x 12-18
	Lateral raises (seated machine)	2 x 12-18
Upper Legs	Leg press (machine)	2 x 12-18
	Leg extension (seated machine)	2 x 12-18
	Leg Curl (seated machine)	2 x 12-18
Lower legs	Calf raise (seated machine)	2 x 12-18
Č	Calf rise (standing)	2 x 12-18
t between sets: 90 sec	CondsT	otal sets = 28

Intermediate phase II (weeks 9-24)**			
70-79% of 1 RM;	3x/week	17-24 weeks	
Body Part	Exercise	Sets x Reps	
CI .		2 10 15	
Chest	Chest press (Barbell)	2 x 10-15	
	Push-up (knees down) https://www.youtube.com/watch?v=EgIMk-PZwo0	2 x 10-15	
	Chest Flye (lying with dumbbell)	2 x 10-15	
	https://www.youtube.com/watch?v=QENKPHhQVi4		
Back	Chest supported Rows (machine)	2 x 10-15	
	Pull ups (machine with body weight assist)	2 x 10-15	
	https://www.youtube.com/watch?v=IWWxTnWEIUU		
Arms	Biceps curl (seated dumbbell)	2 x 10-15	
	https://www.youtube.com/watch?v=in7PaeYlhrM		
	Triceps extension (Cable press down)	2 x 10-15	
	Triceps kick backs (dumbbells)	2 x 10-15	
	https://www.youtube.com/watch?v=biSHQlqtJfQ		
Shoulders	Overhead press (seated machine)	2 x 10-15	
	Lateral raises (seated machine)	2 x 10-15	
	Upright rows (barbells or dumbbells)	2 x 10-15	
	https://www.youtube.com/watch?v=IhZLB48kluc		
T.T	I (1 ')	2 x 10-15	
Upper Legs	Leg press (machine)		
	Leg extension (seated machine)	2 x 10-15	
	Lunges (no weight) https://www.youtube.com/watch?v=QOVaHwm-Q6U	2 x 10-15 2 x 10-15	
	Leg Curl (seated machine)	2 X 10-13	
Lower legs	Calf raise (seated machine)	2 x 12-18	
	Calf rise (standing)	2 x 12-18	
Rest between sets: 90 seconds Total sets = 34			

Advanced phase I (weeks 25-32)**		
>80% of 1 RM; 3x/week		25-32 weeks
Body Part	Exercise	Sets x Reps
Chest	Chest press (Barbell)	2 x 8-12
	Push-up (knees down)	2 x 8-12
	https://www.youtube.com/watch?v=Q7cPaJZoOng	
	Chest Flye (lying with dumbbell)	2 x 8-12
	https://www.youtube.com/watch?v=QENKPHhQVi4	2 0 12
	Incline chest press (machine)	2 x 8-12
Back	Chest supported Rows (machine)	2 x 8-12
	Pull ups (machine with body weight assist	2 x 8-12
	https://www.youtube.com/watch?v=qSmo-8QapTg	
	Shoulder shrug https://www.youtube.com/watch?v=6buT-g-zEZg	2 x 8-12
Arms	Biceps curl (seated dumbbell)	2 x 8-12
	Hammer curls (seated dumbbell)	2 x 8-12
	https://www.youtube.com/watch?v=BbxA1QF3TxY	
	Triceps extension (Cable press down)	2 x 8-12
	Triceps kick backs (dumbbells)	2 x 8-12
Shoulders	Overhead press (seated machine)	2 x 8-12
	Lateral raises (seated machine)	2 x 8-12
	Rear deltoid flyes (machine or dumbbells)	2 x 8-12
	Upright rows (barbells or dumbbells)	2 x 8-12
	https://www.muscleandfitness.com/workouts/shoulder-	
	exercises/videos/dumbbell-upright-row	
Upper Legs	Leg press (machine)	2 x 8-12
•	Leg extension (seated machine)	2 x 8-12
	Lunges (no weight)	2 x 8-12
	Leg Curl (seated machine)	2 x 8-12
Lower legs	Calf raise (seated machine)	2 x 8-12
_	Calf raise (standing)	2 x 8-12
Rest between sets:	60-90 seconds	Total sets = 42

	Advanced phase II (weeks 32 +)**	
% of 1 RM; 4:	32+ weeks	
Body Part	Exercise	Sets x Reps
	Monday and Thursday	
Chest	Chest press (Barbell or dumbbell)	3 x 6-10
	Push-up https://www.youtube.com/watch?v=Q7cPaJZoOng	3 x 6-10
	Chest Flyes (lying with dumbbell)	
	Incline or decline chest press (barbell or dumbbell)	3 x 6-10
	https://www.youtube.com/watch?v=qSmo-8QapTg	3 x 6-10
Back	Chest supported Rows (barbell or dumbbell)	3 x 6-10
	Pull ups (with or without assist)	3 x 6-10
	Shoulder shrug (barbell or dumbbell)	3 x 6-10

	https://www.govenloop.dfite.com.govenloop.de.udu.gov	
	https://www.muscleandfitness.com/workouts/shoulder-	
	exercises/videos/dumbbell-shrug	
Upper	Squat (machine)	3 x 6-10
Legs	Leg extension (seated machine)	3 x 6-10
	Lunges (dumbbells)	3 x 6-10
	https://www.muscleandfitness.com/workouts/leg-	
	exercises/videos/dumbbell-lunge	
	Leg Curl (seated machine)	3 x 6-10
Tuesday and Friday		
Arms	Biceps curl (seated dumbbell)	3 x 6-10
	Biceps curl (Standing barbell)	3 x 6-10
	Hammer or Preacher curls (seated dumbbell)	3 x 6-10
	Triceps extension (lying with barbell or dumbbell)	3 x 6-10
	Triceps kick backs (dumbbells)	3 x 6-10
Shoulders	Overhead press (barbell or dumbbell)	3 x 6-10
	Lateral raises (dumbbell or cable)	3 x 6-10
	Upright rows (barbells or dumbbells)	3 x 6-10
	Rear deltoid flyes (machine or dumbbells)	3 x 6-10
Lower legs	Calf raise (seated machine)	3 x 6-10
	Calf raise (standing)	3 x 6-10
Rest between sets: 60 seconds Total sets = $33/\text{day}$		Total sets = $33/day$