



Mineral Area College

Serving Communities Since 1922



Men's Basketball

STRENGTH & CONDITIONING PROGRAM

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PURPOSE

The purpose of the Cardinals strength and conditioning manual is to provide the athlete with a general overview of our strength and conditioning program. Methods we endorse are based on physiological fact, the latest literature available, and many years of experience. Your whole college experience is a learning environment and the weight room is no different. The things learned in this program will be applicable to your life after college. The purpose of this strength and conditioning program is to make a stronger, bigger, faster, better-conditioned athlete, who is less susceptible to injury.

INTRODUCTION

The Cardinal way is summed up in one word...**INTENSITY**. It is maximum gains in the minimum amount of time. Athletes invest their time in weight room with a purpose and do not spend their time doing non-productive activities. Everything we do is for a reason and a purpose. Consequently, our workouts are very intense, relatively brief, and never more than five times per week.

Strength training for athletics is only valuable in the context of the sport. We are not a weightlifting team, nor are we marathon runners. Too much emphasis in one area of training leaves you deficient in other areas. Overall fitness, specific to the needs of the game of basketball, is our priority. There are several elements to make up our overall levels of fitness. They include:

1. Muscular strength
2. Cardiovascular fitness
3. Flexibility
4. Skill development
5. Rest and recovery

Each area must be addressed individually to achieve overall fitness for the athlete. Intensity and effort are the keys to proper training. It is the reason for strength and conditioning gains, not magical formulas, superhero routines, or miracle supplements. Intensity includes:

- perfect repetitions performed with maximum effort
- complete concentration throughout a workout session
- continuous effort, even when the body is in severe oxygen debt
- hard work

Our conditioning program is approached in the same fashion, with our goal to be in peak shape by the start of practice. We will follow a general conditioning program that starts with aerobic conditioning and becomes more sport specific the season draws near.

STRENGTH TRAINING PRINCIPLES

The five checkpoints are an outline of our philosophy of effective and progressive strength training. Maximum gains will be obtained if these five checkpoints are always observed.

1. Full range of motion exercises - raise and lower the weight through the muscle's full range of motion.
2. Allow the muscles to raise the weight - eliminate arching, bouncing, throwing, and jerking movements while raising the weight.
3. Emphasize the lowering of the weight:
 - Lower the weights in a controlled manner do not drop it.
 - The muscle that is used to raise the weight is the same muscle used to lower the weight - use 3-5 seconds as a guideline in lowering weights.
 - You can lower approximately 40% more weight than you can raise.
4. The point of momentary muscular fatigue has been reached when the athlete can no longer properly lift another good repetition - each set must be performed with all out effort each and every time.
5. Supervision is important. Athletes should be paired up so that every repetition of each exercise is supervised to guarantee proper execution. Responsibilities of the spotter include:
 - Injury prevention – no arching, bouncing, or jerking of the weights.
 - Recording of pertinent data, only count the good repetitions.
 - Verbally encourage the lifter to exert and all out effort while utilizing the techniques mentioned above.
 - Make the workout as hard as intense as possible for the lifter.

STRENGTH TRAINING PROGRAM

The strength-training program consists of four major circuits. These circuits focus on building overall strength while targeting on the legs, chest, arms, and shoulders. We will spend three to five days per week in the weight-room during the early part of the preseason. We use the preseason, postseason, and summer for strength development. As the season approaches, we will scale back the weight training sessions to two to three days a week and lift for maintenance only, not development.

Two weeks after the season is over, we will start an eight-week cycle of lifting four days a week for strength development. We encourage the athletes to complete an eight-week cycle of strength development over the summer.

1. Circuit A (WC)
 - Lat. Pull-downs (front & back)
 - Triceps (extension and pull down)
 - Upright Row
 - Supine Pull-over
 - Dumbbell Curls (regular, alternate)



2. Circuit B (WR)

- Bench Press (wide, tight)
- Shoulder Shrugs (dumbbell)
- Seated Military Press (dumbbell)
- Dumbbell Fly



3. Circuit C (WC)

- Leg Press
- Seated Military Press
- Leg Extensions
- Hamstring Curls
- Pectoral Fly
- Dumbbell Curls (hammer, seated alternate)
- Dumbbell Lunges

4. Circuit D (WR)

- Squats (regular, box squats)
- Leg Sled (squats, toe-raises)
- Bench Press (regular)
- Incline Bench Press
- Triceps Plate Press



FLEXIBILITY PRINCIPLES

Flexibility is the term used to define joint mobility and range of motion. The greatest determiners are flexibility our age, activity level, in genetics. Most conditioning programs have implemented stretching exercises to prevent injuries. When undergoing a stretching program, the following three stages should be adhered to:

1. Warm-up - is important to elevate the muscle temperature prior to stretching. This can be done during low intensity aerobic exercise such as a slow jog.
2. Pre-stretch - begin with a slow pre-stretch that adds only slight tension to the muscle. Disposition should be held for 10-20 seconds while the muscle accommodates tension.
3. Stretch - during the actual stretching phase, slowly lengthen the muscle group involved.

FLEXIBILITY PROGRAM

We will start each daily session with a warm-up activity and stretching. We will also use a cool-down session to end each daily session to help reduce the risk of injury.

SPECIFICITY OF SKILL

Skill and exercise are two separate qualities. Each must be developed separately. To improve the skill, you must practice that specific skill. An athlete must realize that skills are learned, but they are rapidly forgotten. These skills must be performed regularly to be maintained. Strengthen your muscles in the weight room, condition the cardio-respiratory and muscular system, and practice the specific skills used to play the game of basketball.

INDIVIDUAL SKILL DEVELOPMENT WORKOUTS

These skill development sessions will be completed two to three times a week in the preseason. Each skill development workout is built specifically for the athlete and will challenge the athlete to improve their basketball specific skills. We will concentrate on offensive fundamentals in these sessions. The fundamentals we stress include:

- Ball-handling/dribbling
- Passing
- Preparing for the shot/footwork
- Cutting
- Screening
- Shooting
- Free-Throws
- Perimeter-moves
- Post-moves



OTHER PRINCIPLES

Rest and recovery is just as important as the exercise itself. A college athlete's greatest challenge may be getting enough rest to make steady gains from strength and conditioning programs. Each athlete should get on a schedule that allows 7 to 10 hours of sleep per night. The athlete should take naps if they are easily fit in the schedule.

Nutrition is the one component of the fitness program where most people are misinformed or misunderstood. Everyone should eat a well-balanced diet. A balanced diet should consist of eating approximately 60% of your daily calories from carbohydrates, 20% from fats, and 20% from proteins. It is important to maintain food intake at a constant level throughout the day. Remember to eat or drink carbohydrates within 60 minutes of training for best results.



MINERAL AREA COLLEGE STRENGTH & CONDITIONING PROGRAM

Circuit A

Lat Pulls (front)

Lat Pulls (back)

Tricep (extension)

Tricep (pull-down)

Upright Row

Supine Pull-over

DumbBell Curls

Alternate Curls

Rep/Wt Rep/Wt Rep/Wt Rep/Wt Rep/Wt Rep/Wt Rep/Wt Rep/Wt Rep/Wt Rep/Wt

Circuit B

Bench Press (wide)

Bench Press (close)

Shoulder Shrugs

Seated Military

DumbBell Fly

Circuit C

Leg Press

Leg Extension

Leg Curls

Pectoral Fly

Curl Press

Lunges

Circuit D

Squats

Box Squats

Toe Raises (sled)

Bench Press

Incline Press

Warm-Up

High Knees
Butt-Kickers
Kariokee
Gliders
Bounding (skips)
Shuffles
Broad Jump

BFS Agility

Dot System

Front & Back
Turn-Arounds
Pattern Together
Pattern (One Foot)
Corners

Jump Work-out Series

	<u>Week1</u>	<u>Week 2</u>	<u>Week 3</u>	<u>Week 4</u>	<u>Week 5</u>	<u>Week 6</u>
Calf Raises (single leg)	1 X 20	2 X 20	2 X 25	2 X 30	2 X 35	2 X 40
Calf Raises	1 X 20	2 X 20	2 X 25	2 X 25	2 X 30	2 X 30
Thrust Ups (pogo-stick)	2 X 15	2 X 20	2 X 25	2 X 30	2 X 35	2 X 40
Burn-Outs (quick pogo)	1 X 50	2 X 50	2 X 75	2 X 100	3 X 75	3 X 100
No-Arm (above head)	1 X 20	2 X 20	2 X 25	2 X 30	2 X 35	2 X 40

Plyo-metric Box Series

Jumps	2 X 15	2 X 20	2 X 20	2 X 25	3 X 10	3 X 10
Step-Ups	2 X 10	2 X 15	2 X 20	2 X 20	3 X 10	3 X 10
Depth Jumps	2 X 10	2 X 10	2 X 15	2 X 15	3 X 10	3 X 10
Bench Hops	1 X 10	1 X 10	2 X 10	2 X 10	2 X 12	2 X 15

Jump Rope Series

Feet Together	1:00	1:30	2 X 1:00	2 X 1:30	2 X 1:30	2 X 1:30
Alternate	1:00	1:00	2 X 1:00	2 X 1:00	2 X 1:30	2 X 1:30
Right Leg	:30	:45	2 X :30	2 X :45	2 X 1:00	2 X 1:00
Left Leg	:30	:45	2 X :30	2 X :45	2 X 1:00	2 X 1:00
Quarter Squat	1:00	1:30	2 X 1:00	2 X 1:30	2 X 1:45	2 X 1:45
Speed	1:00	1:00	2 X 1:00	2 X 1:00	2 X 1:30	2 X 1:30
Heavy Rope	1:00	2:00	2 X 2:00	2 X 2:00	2 X 2:30	2 X 2:30