Please refer to the PMBIA manual, pages 48-77, for more detail on the following sections:

Outdoors for All Stand-up Mountain Bike 101 Session Lesson Plan

Before the lesson: Contact registered participants and give them an overview of what to expect

- Introduce yourself and your experience within the first contact.
- Send out location and time of first lesson, and what to bring.
- Check to see if anyone plans on bringing their own gear and make sure to inspect gear before start of first day.
- Ask if there are any questions that can be answered before the first day of lessons.

During the lesson:

- Keep things moving. Mileage and self-discovery are always better teachers than you are. Instructors and coaches are there as a guide to keep things fun and safe, and to encourage self-discovery.

Day 1 Lesson: ‘Parking lot lesson’ / intro to dirt.

(About 1hr)

- Bike fitting / Bike check-out
  - PPE check-out and fitting
  - Bike sizing (small -XL)
  - Teach participants to set-up their own suspension PSI
  - Explain and help check SAG
  - Seat adjustments / explain dropper seat
  - Necessary adaptations
  - Fill out proper forms completely (MTB fitting form)
  - Names on bikes
  - Water bottles in cages
- Group introductions and team building
- Bike overview
  - Brief overview of controls
  - Bike components
  - Bike check
  - Basics of care
  - Fix a flat
- Explain MTB Responsibility Code

Lesson format: static/active/freeride (About 2 hrs)

- Introduce riding skill Position and Balance (include vision and scanning)
  - Self-awareness
  - Center of Mass (rider and bike)
  - Stability (rider and bike)
- Base of Support (rider and bike)
- Level pedals
- Vertical body movement
  - Neutral vs. Ready position
  - Lower seat
  - Wide arms/Wide legs (guns out/buns out)
  - Chin over handlebars
  - Hips over saddle/bottom bracket
  - Flexion/Extension from the feet, up.
  - Slow maneuvers vs fast maneuvers
  - How does the bike compress?
  - Where are the riders eyes?
- Fore/Aft body movement
  - Hand off front brake
  - Toe down vs heel down
  - Hips forward of saddle vs hips behind saddle
  - Slow maneuvers vs fast maneuvers
  - When we move our hips fore/aft what is our upper body doing?
  - How does the bike compress?
  - What happens base of support?
  - Body position back to center
  - Where are the riders eyes?
- Vertical and Fore/Aft body movement
  - Down and back (L pattern)
  - Introduce breaking
  - Heels down/Head up
  - Front wheel lifts
  - Don’t over extend (we don’t want to be at the end of our rope)
  - Uphill body position
- Mileage and practice. Vary from flat to graded terrain, narrow to wide, firm and loose
- Keep checking for understanding
- Give group and individual feedback (what’s working, what needs improvement)
- Keep it loose and fun (got any jokes, stories?)
- Post lesson:
  - Return and clean bikes (all participants should clean their own)
  - Wrap-up (including what to expect for next week)
  - Fill out skills assessment

Day 2 Lesson: Intro to MTB trails
- Bike check-out
  - PPE
  - Names, bike, proper fit - still matches up
  - Make appropriate changes if necessary
- Water and snacks
- Bike check
- Chain care
- Build trust and comradery

Lesson format: static/active/freeride (About 2.5 hrs)

- Review responsibility code as it relates to lesson
- Review key concepts from day 1
  - Group warm-up ride
  - Pair-up if necessary
  - Split group if necessary
- Introduce and practice riding skill **Operation Of Controls**
  - Gears
    - Shifting
    - Timing
    - Cadence
    - Pedaling
    - Chain line and pressure
    - Foot position
    - Up-hill vs downhill
    - Pedal/power on/power off/shift/resume
    - Boobs to bars/head up
    - Race with lowest gear vs highest gear
    - Carousel – ride in a circle working on finding ideal cadence
    - 60rpm is a good rule of thumb
  - Brakes
    - Body position while breaking- COM slightly aft (heels down / head up)
    - Covering the lever with 1 finger
    - Gradual, consistent, modulation
    - Ratio of rear to front as it relates to speed, terrain, and timing
    - Front Brake only- great for slowing and stopping
    - Rear Brake only- great for not speeding up
    - Both Front and rear- play with ratios
    - Timing, selective braking
    - Slowest race – last one to finish line wins
    - Foot down – Riding in designated space (circle is good) the goal is to not put your foot down
    - Track stand
    - Add speed (what happens to vision when we speed up?)
    - Braking without skidding
    - Controlling a rear skid
    - When not to brake
  - Dropper Seat
- Why it is a benefit
- Position is set accurately
- Timing of use
- If necessary set it and leave it
- Mileage and practice. Vary from flat to graded terrain, narrow to wide, firm and loose
- It’s about being efficiency
- Post lesson:
  - Return and clean bikes (all participants should clean their own)
  - Wrap-up (including what to expect for next week)
  - Fill out progress reports

**Day 3 Lesson: Single Track**

- Bike check-out
  - PPE
  - Water and snacks
  - Bike check
  - Suspension PSI still accurate
- Build trust and comradery

Lesson format: static/active/freeride (About 2.5 hrs)

- Review responsibility code as it relates to lesson
- Review key concepts from day 1 and 2
  - Group warm-up ride
  - Pair-up if necessary
  - Break group if necessary
- Introduce riding skill **Terrain Awareness**
  - Trail scanning
  - Now vs Next
  - Slow vs Fast
  - Decision Making
  - Line choice (direct, smooth, or efficient)
  - Back to body position (Vertical and fore/aft)
  - Intro to cornering
  - Roll-overs
  - Front wheel lifts
  - Obstacle avoidance vs obstacle clearance
  - Steering
  - Ratcheting
- Mileage and practice. Vary from flat to graded terrain, narrow to wide, firm and loose
- Recommend a bike park for this day
- It’s about speed control and anticipation
- Post lesson:
  - Return and clean bikes (all participants should clean their own)
  - Wrap-up (including what to expect for next week)
Day 4-6 Lesson: Build Confidence through repetition

- Bike check-out
  - PPE
  - Water and snacks
  - Bike check
- Build trust and comradery

Lesson format: active/freeride/self-discovery (About 3 hrs)

- Review responsibility code as it relates to lesson
- Review key concepts from day 1-3
  - Group warm-up ride
  - Pair-up if necessary
  - Split group if necessary
- Mileage, Mileage, Mileage
- Reinforce First 3 riding skills
- Session terrain, repeat favorite trails
- Give group and individual feedback
- Introduce new terrain only when ready
- Repeat

Please refer to the PMBIA manual, pages 99-115, for stand-up beginner to intermediate example lessons.
Please refer to the PMBIA manual, pages 78-90, for more detail on the following sections:

Outdoors for All Stand-up Mountain Bike 102 Session Lesson Plan

Day 1 and 2 Lessons: Intro to Intermediate Riding

(About 30 min)

- Bike fitting / Bike check-out
  o Proper PPE
  o Inspect participants bike
  o OFA Bike sizing (small -XL)
  o Have participants fit their own bike
  o Check / Explain bike fitting as necessary
  o Necessary adaptations
  o Fill out proper forms completely (MTB fitting form)
  o Names on bikes
  o Water bottles in cages

- Group introductions and team building
- Bike overview
  o Bike check
- Review MTB Responsibility Code

Lesson format: static/active/freeride (About 2.5 hrs)

- Review MTB 101
  o Group warm-up ride
  o Practice first 3 riding skills as necessary
  o Don’t move to more challenging terrain unless the group is ready.
  o All of the intermediate skills can be practiced on easier, more familiar terrain
- Introduce and practice riding skill Position and Balance: Lateral Body Movement
  o Great for stability in turns and maintaining flow
  o Bike and body separation
  o Inclination vs angulation
  o Arms flex and extend to lean the bike under the body
  o Hips move side to side to counter balance lean of bike
  o Walk bike holding on to saddle through cones. ‘Steer’ bike without touching handlebars
  o Practice weaving through cones leaning bike under body, keeping body still in neutral position
  o Do the above in ready position
  o Flat cornering cone drill vs berms
  o Slow speed cornering vs high speed cornering
  o Footwork: dropping outside foot. Timing is important
- Introduce and practice riding skill Position and Balance: Rotational Body Movement
  o Great for off-cambered terrain and tight turns
  o Hips rotate over the bike
  o Knees point to exit
- Vision is up looking towards exit
- Footwork: Combo flexion and extension movements (heel down on one foot while toe down on the other)
- ‘Twisting the bike’
- Practice cone drills with rotation
  - Practice combing lateral and rotational movements
    - Hard to do, even harder to master
    - Switchbacks
  - Practice Position and Balance through all 4 movements: Vertical/Horizontal/Lateral/Rotational
    - Will take time to develop
  - Introduce and practice riding skill Direction Control
    - Using the body to move the bike (ride your bike, don't let your bike ride you)
    - Inclination vs Angulation
    - Lateral and rotational body position and balance
    - Bike and body separation
    - Flat vs bermed corners = more vs less angulation
    - Bike becomes more stable at speed
    - Bike becomes more stable with technical terrain
    - Holding a line vs changing a line
    - Steering vs bike and body separation
  - Post lesson:
    - Return and clean bikes (all participants should clean their own)
    - Wrap-up (including what to expect for next week)
    - Fill out progress reports

Day 3 and 4 Lessons: Intermediate Riding Continued

- Bike check-out
  - PPE
  - Water and snacks
  - Bike check
- Build confidence and comradery

Lesson format: static/active/freeride/ (About 3 hrs)

- Don’t move to more challenging terrain unless the group is ready
- All of the intermediate skills can be practiced on easier, more familiar terrain
- Review MTB responsibility code as it relates to lesson
- Introduce and practice riding skill Pressure Control
  - Create or release pressure on the bike by pushing or pulling or by using your body as suspension.
  - Control pressure by changing body movements as it relates to changes in terrain
  - Momentum, traction, and efficiency will be improved
  - Passive pressure control: keeping body relaxed so it can absorb terrain
  - Active pressure control: Pushing or pulling on bike to actively create or release pressure
  - Sensory skill
- Bringing your own style into your riding
- Pumping rollers is a good example
- Vital for most maneuvers like wheel lifts, hops, corners, etc.

- Introduce and practice riding skill **Timing and Coordination**
  - Combing all other skills to bring flow and consistency into ones riding
  - It’s about refinement
  - Changing variables like terrain, speed, and direction means we need to be consistent and smooth to achieve flow and hopefully increase the fun factor
  - Timing factors include: When (early/late/close/far), Speed (fast/slow), Impulse (Suddenly/gradually), Intensity (a little/a lot/hard/soft), and Duration (short/long)
  - Repetition and session-ing are good ways to build timing and coordination.

- Post lesson:
  - Return and clean bikes (all participants should clean their own)
  - Wrap-up (including what to expect for next week)
  - Fill out progress reports

**Day 5-6 Lesson: Building Confidence on Intermediate Terrain**

- Bike check-out
  - PPE
  - Water and snacks
  - Bike check

- Build confidence and comradery

Lesson format: active/freeride/self-discovery (About 3 hrs)

- Review responsibility code as it relates to lesson
- Review key concepts from day 1-4
  - Group warm-up ride
  - Pair-up if necessary
  - Split group if necessary

- Mileage, Mileage, Mileage
- Reinforce riding skills
- Session terrain, repeat favorite trails
- Give group and individual feedback
- Introduce new terrain only when ready
- Repeat

*Please refer to the PMBIA manual, pages 128-160, for stand-up intermediate and beyond example lessons.*