SESSION 2 Summary

Videos

REST 722-Intro to CEREC Software & Digital Imaging

REST 722-Designing Basic

REST 722-Milling Grinding

Scanning Demo

Designing Demo 1

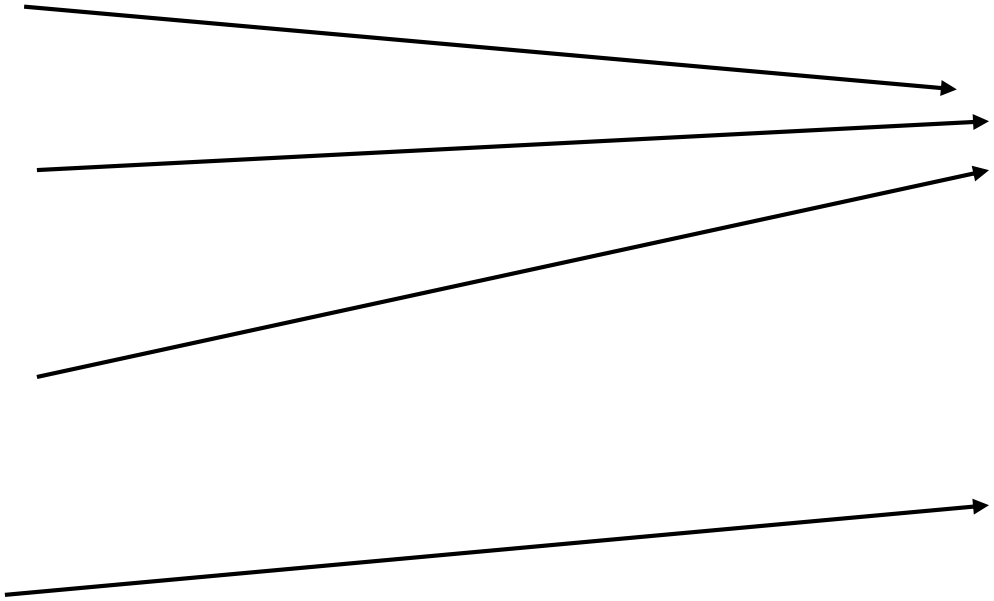
Designing Demo 2

Scanning

- 7-8 teeth need to be scanned for the precision of the proposal
- Buccal bite – 4 teeth
- Linear scanning

Designing

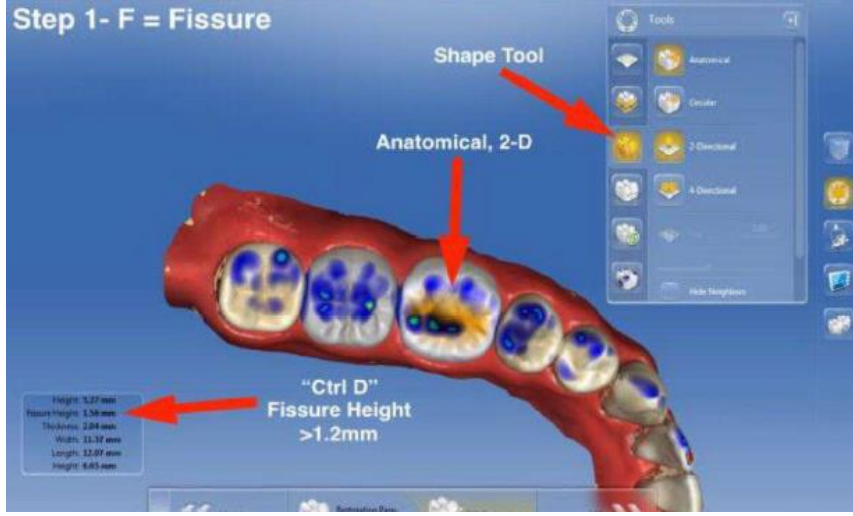
- Fissure
- Occlusion
- Contour
- Contact



2-Directional Circular Shape

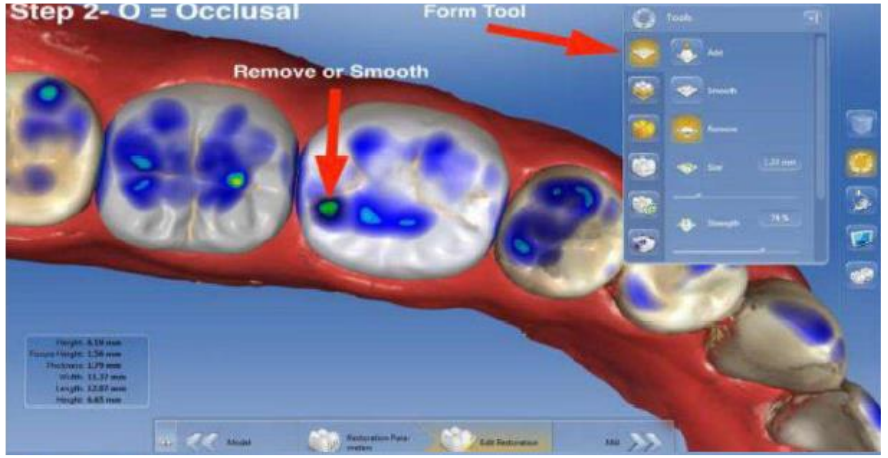
Form Smooth Tool

F- Fissure



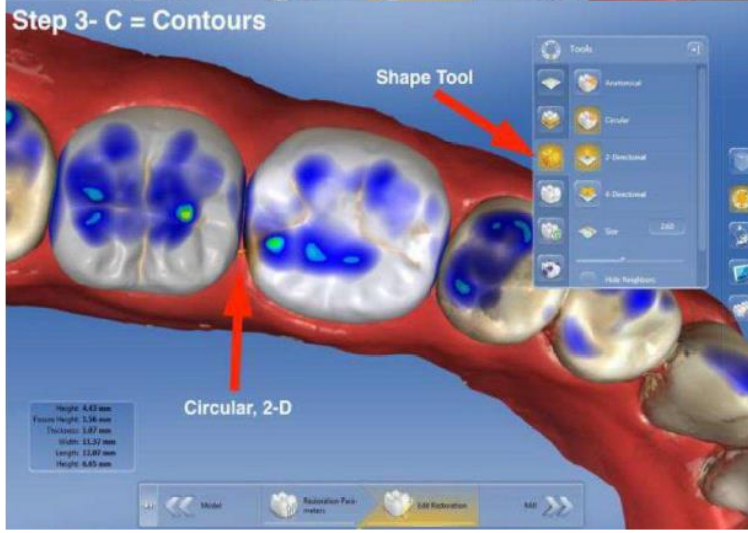
- Show cursor detail box.
- Select Shape Tool > Anatomical or Circular , 2-D >
- Highlight the central portion of the crown.
- Left click & hold, track ball up to lift the height of the fissure.
- Let go of click and see where new fissure
- Height is in the cursor detail box.

O- Occlusal



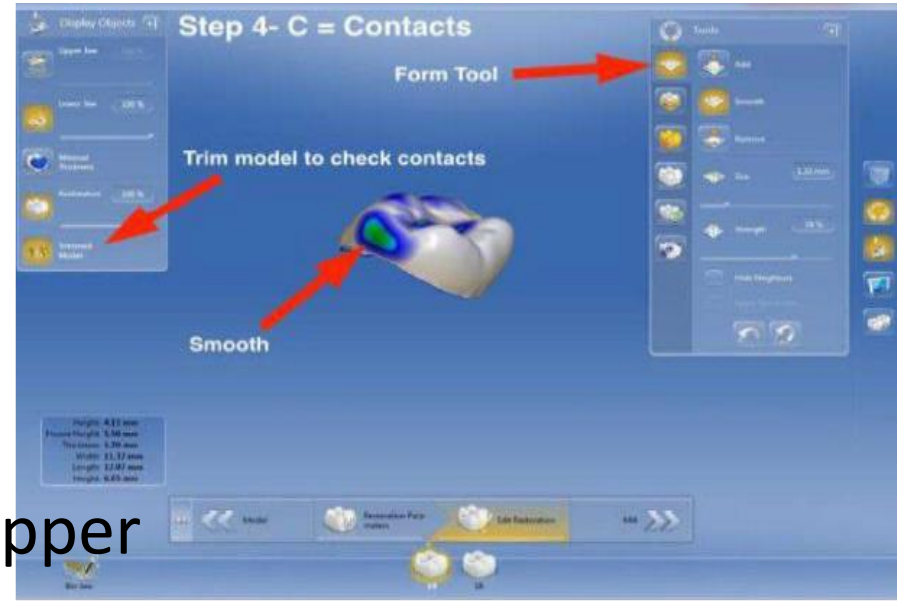
- You can either use Smooth Tool or Form Tool to reduce occlusal interferences.
- The goal is to have royal blue occlusal contacts.
- Form Tool > Smooth > make sure the orange diameter is slightly bigger than the interference and either left click, or hold left click and move cursor around.

C- Contours



- Select Shape Tool > Circular, 2-D.
- Make sure arrow is pointed in the direction that you want to change, left click & Hold, track ball in that direction.

C- Contacts



- Select Display Objects > Deselect lower or upper jaw
- Form Tool > Smooth and either left click, or
- hold left click and move cursor around as if you were painting that spot.
- If your adjacent contact is rough or irregular, you will have to polish/recontour the proximal surface prior to scanning.

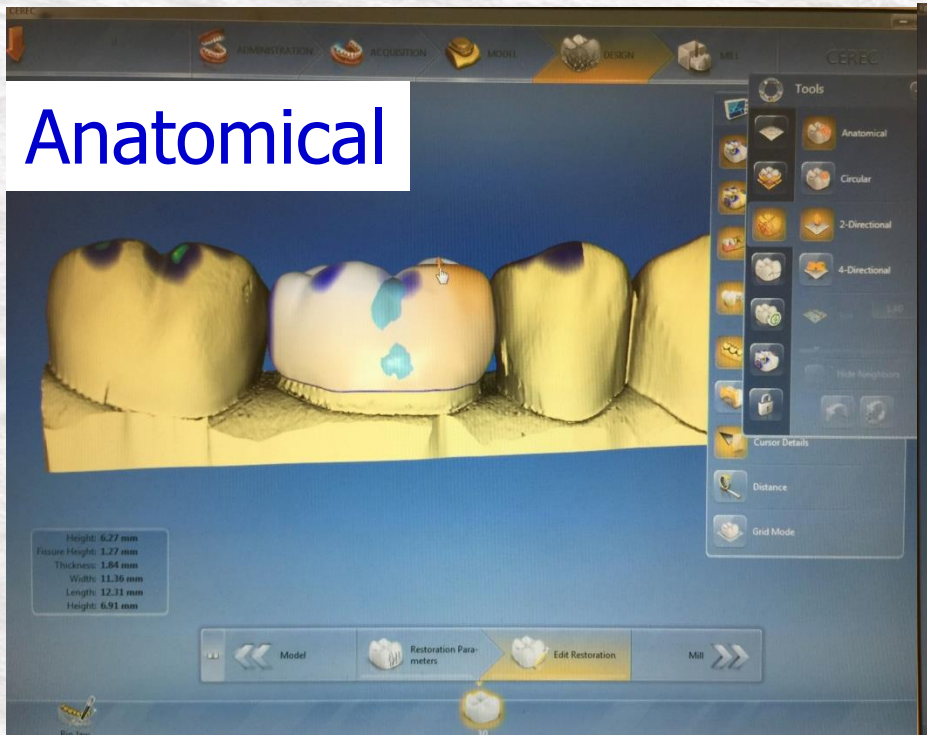
Design Phase: Shape Tool

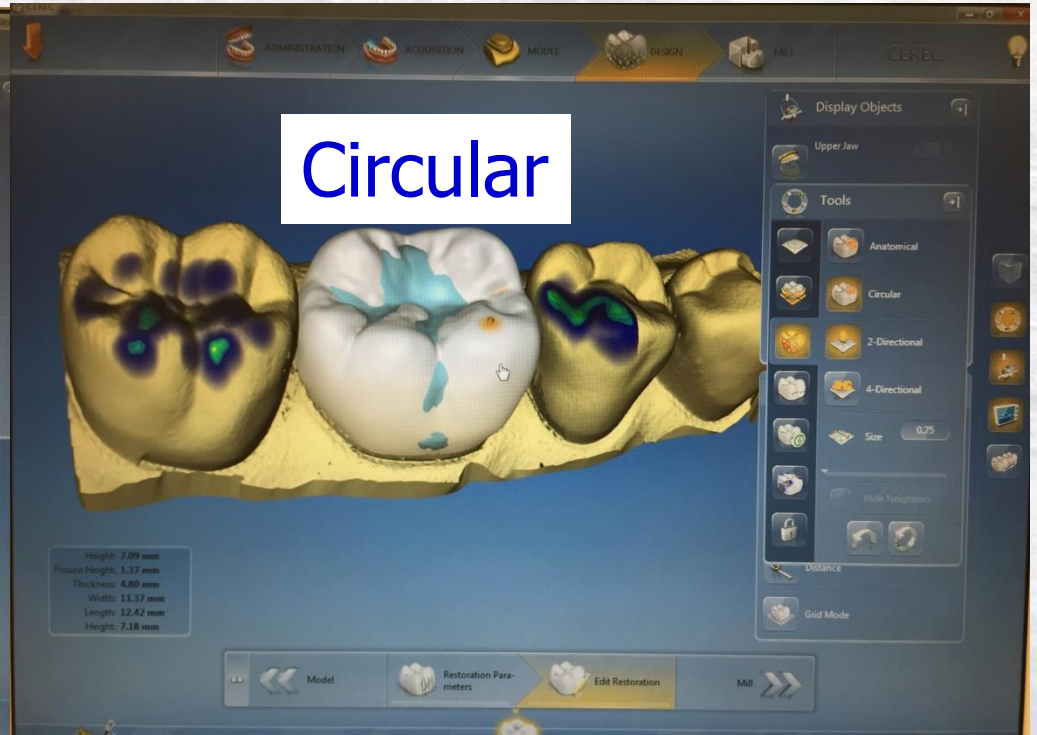
Anatomical > cursor used to select an anatomic feature to edit:

Lt-click & hold and move the selected feature; cusp, fissure, etc

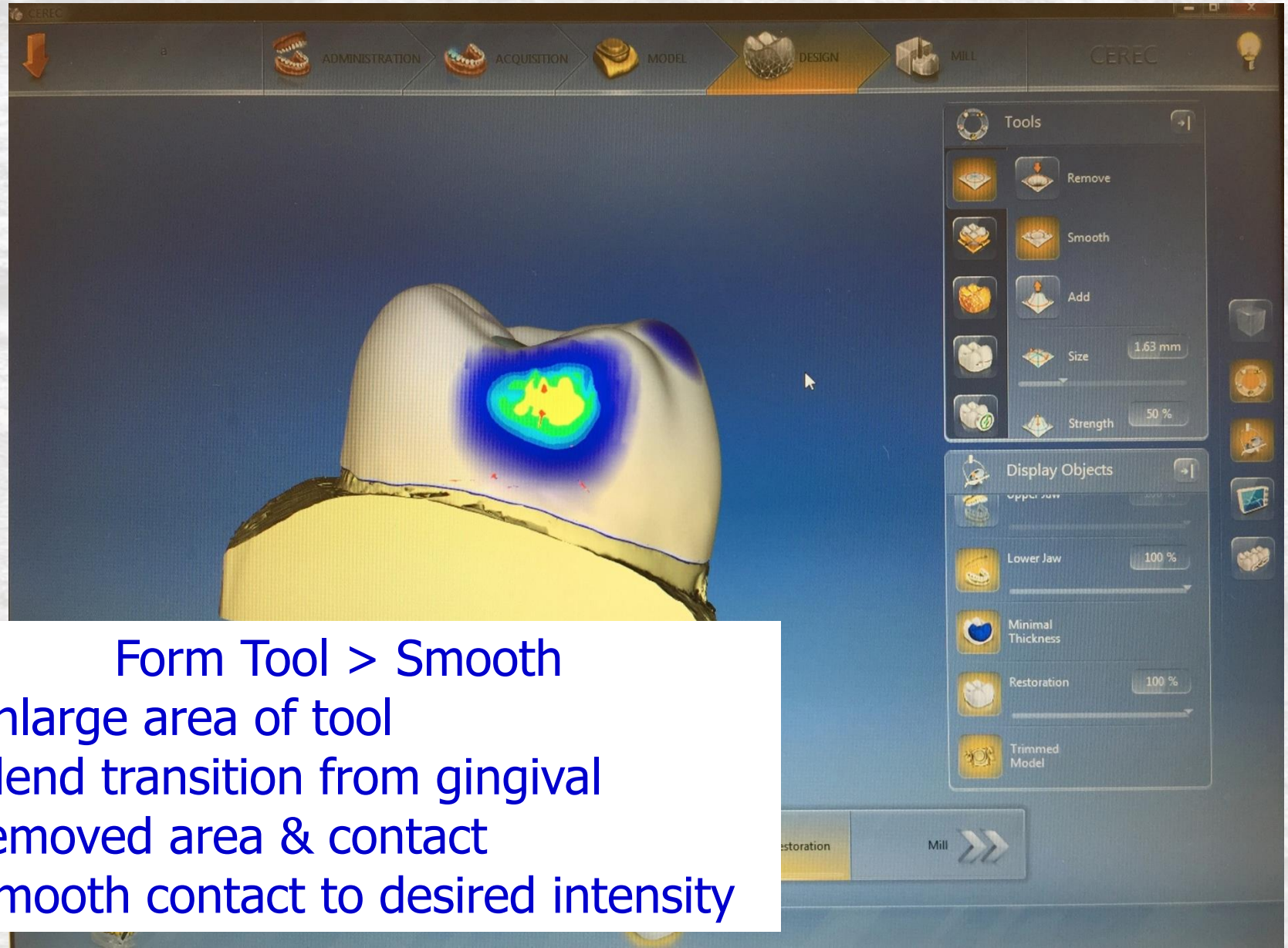
Circular > cursor used to select location and size of an area to edit:

Lt-click & hold and move the selected defined area





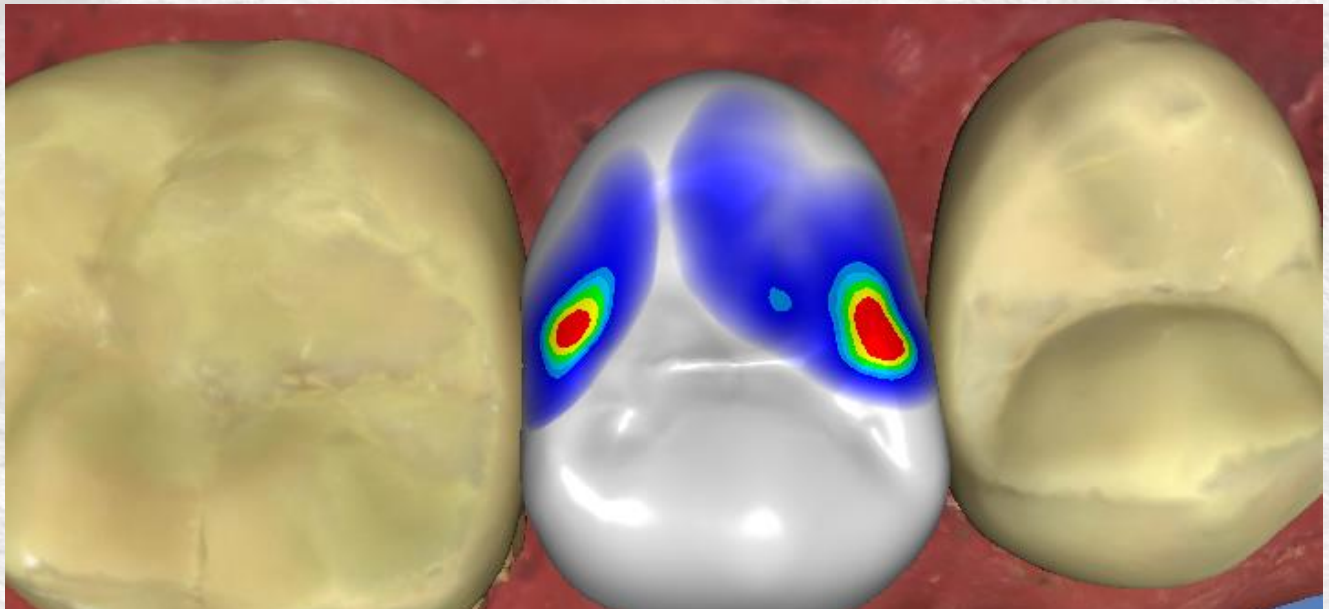
Design Phase:Form Tool



Form Tool > Smooth

- Enlarge area of tool
- Blend transition from gingival removed area & contact
- Smooth contact to desired intensity

Design Phase



Contact Strength

Blue = within 1 μm of contact

Green = 1 - 50 μm intersection

Yellow = 50 - 100 μm intersection

Red = >100 μm intersection

Occlusal Contacts

- Consider plane of occlusal table first
- May improve by rotating or sliding the occlusal table

Course Schedule

Session 2

Time	Activities
1:00 – 1:15	Review/Summary lecture and Q&A
1:15 – 5:00	- Scan & restoration design best prep (full crown prep #30) - Rotations through Omnicam, scanning, designing and milling **emax**
1:15– 5:00	Full ceramic crownlay prep #19 x 2 (overlay L cusps) - Self assessment of each prep #19; select the best - Review prep with instructor

Scanning and designing schedule for session 2 #30 all-ceramic crown

Student								
Unit #	1	2	3	4	5	6	7	8
Time								Keep this unit for milling
1:15 – 1:35	Almog	Amundson	Anderson	Biltoft	Bailey	Baker	Blair	
1:35 – 1:55	Bornstein	Cote	Bothwell	Carter	Chen	Chou	Dinius	
1:55 – 2:15	Elamin	Elkhal	Ellis	Forshaw	French	Delgado	Haraguchi	
2:15 – 2:35	Hample	Naemura	Kameshige	Schwyhart	Kludt	Krippaehne	Lahti	
2:35 – 2:55	Lara	Waterworth	Lawrence	Liao	Manabat	Mondelli	Morales	
2:55 – 3:15	Nasirzadeh	Nem	Nguyen, A	Nguyen, D	Nordlie	Nordmark	Novak	
3:15 – 3:35	Osborne	Renyer	Riddle	Robinson	Rose	Roshdy	Schumacher	
3:35 – 3:55	Shah	Singh	Sonu	Steiner	Strand	Sultan	Taher	
4:15 – 4:35	Tew	Tran	Van	Watcher	Wadas	Walker, Be	Walker, Br	
4:35 – 4:55	Young	Youssef	Zack-Cade	Zhen				

Quiz questions over Session 2

- What does "FOCC" stand for in designing?
- Define graphic indicators for occlusion and proximal contacts.
- How do you know and check the minimal thickness of restorations?
- What is a difference between "shape anatomical" and "shape circular" tools?
- What is the proper order in which to attempt alterations to the proposed restoration (move, shape, form)?
- Advantage of CEREC digital scanning
- Steps after completing milling?
- Function of two milling burs?
- #12 and #14 size blocks – what is a difference?

Submission deadline Session 3