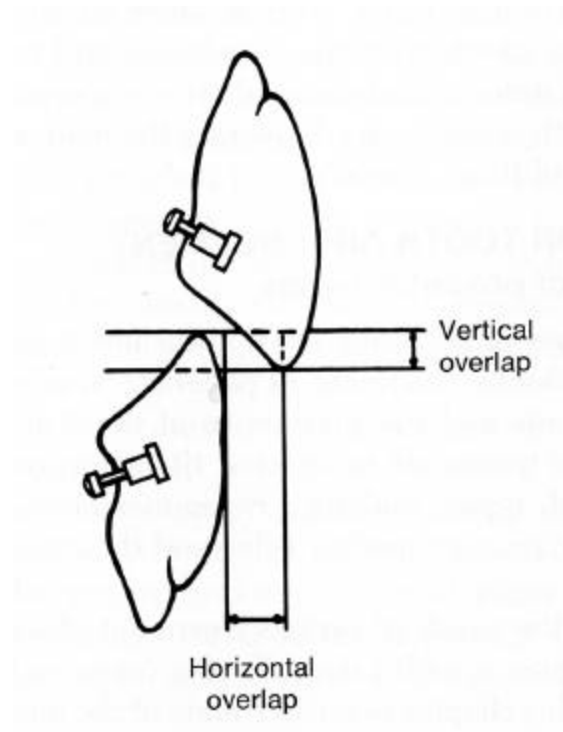


# Laboratory Project # 5

## Setting Mandibular Anterior Denture Teeth

**Remember:** In denture fabrication the mandibular incisors should not touch the maxillary incisors in centric relation. Anterior teeth are set to follow the arch form of the patient's residual ridges. The incisal edges of the anterior teeth should be set to correspond to the shape of the arch. A square arrangement is indicated for a square-shaped maxillary residual ridge, a tapering arrangement for a tapering ridge form, and an ovoid arrangement for an ovoid arch.



Criteria for arrangement of mandibular anterior teeth are as follows:

### a. Mandibular central incisors

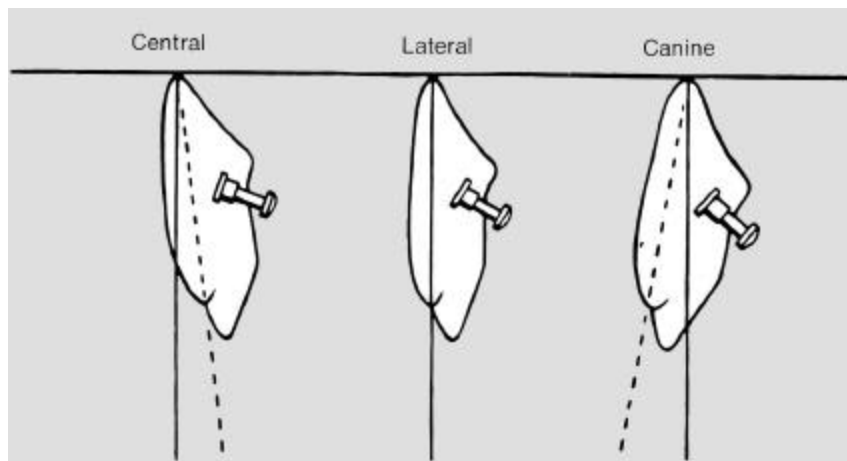
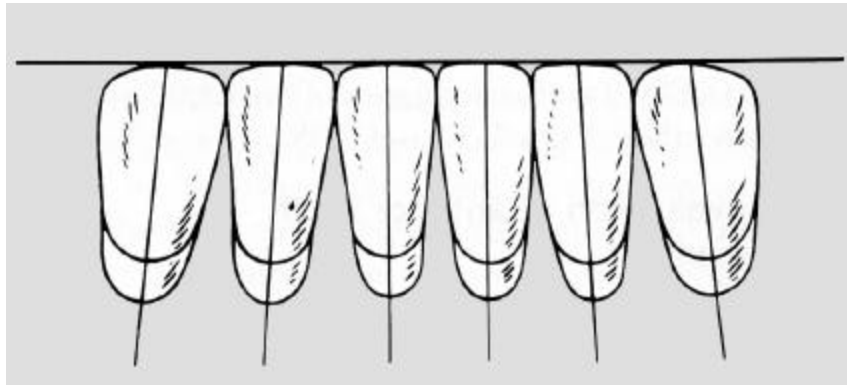
1. The long axis of the mandibular central incisor should be set perpendicular to the occlusal plane.
2. Arrange the anterior teeth. Set the mandibular central incisors so that the maxillary incisors cover them, 1 mm vertically and 1 mm horizontally (1 mm horizontal and vertical overlap) if you are using anatomic posterior teeth.
3. The contact point of mandibular incisors should coincide with the midline of the maxillary teeth.

### b. Mandibular lateral incisors

1. The long axis of the mandibular incisor should be slightly inclined distally at the cervical portion of the tooth.
2. The occlusal height should be the same as the central incisors.

### c. Mandibular canines

1. The long axis of the mandibular canine is nearly perpendicular to the occlusal plane with a slight distal inclination.
2. The tip of the canine should be at the same occlusal height as the mandibular central and lateral incisors.



## 5. Procedure

- a. Locate the **midline** on the mandibular occlusion rim. Extend this mark onto the land area of the mandibular cast with a pencil. When the maxillary teeth are properly arranged, the **long axis of the maxillary canine will coincide with the distal surface of the mandibular canine**, when viewed from the buccal. Alternatively, the mandibular canines can be arranged first in the proper relationship to the maxillary canines (the cusp tip of the mandibular canine is placed between the maxillary canine and lateral). You then arrange the centrals and laterals in the remaining space( If you prefer to start with the central incisors then laterals followed by canine you can do that, Just don't forget to establish the relation mentioned before between the mandibular canine and the maxillary lateral incisor and canine).
- b. Using a warmed knife cut enough wax from the right side of the mandibular occlusion rim to allow you to position the right central incisor.
- c. Arrange the lower central incisor with its mesial edge at the midline previously marked using the occlusion rim remaining on the left as a guide. Also, use the guidelines presented in the beginning of this section. It may be necessary to grind on the record base with a rotating instrument. It may also be necessary to adjust the ridge lap portion of the denture tooth.
- d. Seal the tooth in position on the lingual surface with wax.
- e. Arrange the right lateral in the same manner.
- f. Now, cut away the left side of the anterior portion of the mandibular occlusion rim and arrange the left central, lateral, and canine teeth. Evaluate the position of the incisal edges of these teeth relative to the plane of occlusion using a metal occlusion template or its substitute.
- g. When using posterior teeth with **cuspal inclines**, set the mandibular anterior teeth so the maxillary anterior teeth have a **horizontal overlap over the mandibular teeth of 1 to 1.5 mm in normal jaw relations**. The incisal guidance, and therefore the incisal guide angle, is determined by the amount of horizontal and vertical overlap of the anterior teeth established by the dentist.