

CHEM 495. Topics: Biochemistry, Physiology and Neurochemistry of Beer, Wine and Alcohol.
Intersession (Rome) 2023

Block II - Possible Exam Questions

- 1) Removing fines from a wine can be tricky. What are "fines" (compounds and chemical nature)? How would you use your understanding of the make-up of a fine to clarify your new wine? Consider all of the options in your answer.
- 2) Explain the classes and reactions of phenols and tannins. (This is a simple question but a COMPLEX answer – do your best).
- 3) What is the role fats, proteins and carbohydrates play in wine flavors and aromas?
- 4) There is a LOT of "information" i.e. opinions about how sulfates and tannins give them headaches. Address the nature of these claims.
- 5) Outline the process malting. What is the purpose of malting? Describe the impact of alpha and beta amylase on beer production and answer the question when a beer maker would choose one over another. How would a brewer adjust their fermentation for either?
- 6) Describe 2-4 important reactions involved in aging wine or beer (choose the most interesting to you). Include the outcome (good and bad) on flavor and aroma.
- 7) What is happening in the beginning, middle and end of a distillation?
- 8) Pick the distilled spirit most of interest to you – define the process of production and the chemical nature that gives the spirit its characteristics.