

Orders and families to know for Botany 400 2nd lecture exam

*Caryophyllales - betalains, dichasium inflorescence, free-central or derived (basal) placentation; petals often lacking

- *Phytolaccaceae CA⁵ CO⁰ A¹⁰ G⁽⁵⁺⁾-berry [raceme; sometimes apocarpic]
- *Caryophyllaceae CA⁵ CO⁵ A^{5,10} G⁽²⁻⁵⁾-capsule [dichasium; free-central]
- *Portulacaceae CA² CO⁵ A⁵⁺ G⁽²⁻³⁾-capsule [few basal ovules; capsule or pyxis]
- *Cactaceae CA[∞] CO[∞] A[∞] G⁽⁴⁾-berry [parietal]
- *Amaranthaceae CA³⁻⁵ CO⁰ A⁵ G⁽²⁻³⁾-achene [unisexual flowers; one ovule; achene or utricle]

*Saxifragales - intermediate between ranunculids and rosids; usually 2-6 carpels that are only slightly fused at base; usually follicles

- *Saxifragaceae CA⁵ CO⁵ A^{5 or 10} G⁽²⁾-follicles
- *Crassulaceae CA⁴⁻⁶ CO⁴⁻⁶ A⁸⁻¹² G⁽⁴⁻⁶⁾-follicles

*Rosales - Nitrogen fixing, loss of corolla, glandular leaf serrations

- *Rosaceae CA⁵ CO⁵ A[∞] G[∞]-follicles spiraea group
- G[∞]-achenes rose group G¹-drupe cherry group G⁽⁵⁾-pome apple group
- *Ulmaceae CA⁴⁻⁸ CO⁰ A⁴⁻⁸ G⁽²⁾-1 seeded samara
- *Moraceae [unisexual, multiple fruit (syconium) of 1 seeded units]