Obtained
Due dates, late work, absences
Assignments are due in class on the due date. I would rather have late work than no work, although you should expect it to be for reduced credit. If you anticipate an absence on the due date of an assignment, please either turn in your work early or discuss alternative arrangements with me.

Academic integrity
You are expected to know and to abide by the University’s Academic Integrity policy. Two primary points you need to know are these: (1) When you turn in (or present) work that uses published material (journal articles, web sites, etc.), you are expected to give the appropriate credit and cite the source(s). (2) Collaboration is encouraged on most assignments, as I strongly believe that we learn more by asking questions and explaining our answers to others' satisfaction. However, if you do work with someone, the work you turn in for grading must be written by you in your own words; if I get identical answers, I will divide the credit evenly.

Students with Disabilities
If you anticipate barriers related to the format or requirements of this course, please meet with me so that we can discuss ways to ensure your full participation in the course. If you determine that disability-related accommodations are necessary, please register with Disability Resources (621-3268; http://drc.arizona.edu) and notify me of your eligibility for reasonable accommodations. We can then plan how best to coordinate your accommodations.

Other classroom issues
We try to keep the classroom clean, and ask for your help. Please do not bring any food or drink (other than bottled water) into the classroom. If there are problems with a seat or with its writing table, please let me know, so that the problems can be addressed as soon as possible. Also, the common-sense rules of good conduct apply, such as cell phones turned off and no web-surfing or irrelevant extra-curricular activity during class.

Notice
The information contained in this course syllabus, other than the grade and absence policies, may be subject to change with reasonable advance notice, as deemed appropriate by the instructor.

Topics Covered
- Celestial mechanics: the two-body problem, the three-body problem.
- Protoplanetary disks: observations, MMSN, vertical structure, radial force balance, surface density evolution.
- Planetesimal formation: aerodynamic drag, planetesimal formation by coagulation, planetesimal formation by gravitational instability.
- Terrestrial planet formation: time scale for formation, gravitational focusing and the Safronov number, Impulse approximation.
- Giant planet formation: core accretion, envelope structure, gravitational instability.
• **Planet migration**: in gaseous disks in planetesimal disks.
• **Spherical planets in hydrostatic equilibrium**: equation of state, polytropes, relation between pressure-density and mass-radius.
• **Static distorted planets**: spherical harmonic representations, gravity anomalies, moments of inertia.
• **Rotational distortion**: Maclaurin and Jacobi theory, Radau-Darwin approximation.
• **Tidal distortion**: tides, hydrostatic response, Love numbers.
• **Rigid-body motion**: moment of inertia tensor, angular momentum of a rigid body, Euler’s equations, effect of dissipation.
• **Energy sources in planets**: gravitational binding energy, thermal energy, radioactivity, tidal dissipation.

**Nondiscrimination and Anti-harassment Policy**
The University of Arizona is committed to creating and maintaining an environment free of discrimination. In support of this commitment, the University prohibits discrimination, including harassment and retaliation, based on a protected classification, including race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, or genetic information. For more information, including how to report a concern, please see: [http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy](http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy)

**University Policies**
All university policies related to a syllabus are available at: [https://academicaffairs.arizona.edu/syllabus-policies](https://academicaffairs.arizona.edu/syllabus-policies).