

课程编号：1713602700

课程名称：航天奇观与神舟飞船

学分/学时：2/32

先修课程：无

适用专业：全校各专业

课程性质：全校选修

教材：郑晓虹，余英 编著.航天概论（第1版）. 人民邮电出版社, 2013 年

主要参考书：王云 编著. 航空航天概论（第1版）. 北京航空航天大学出版社, 2009 年

内容简介：

《航天奇观与神州飞船》课程详尽介绍航天科技中从火箭的发明发展、载人航天以及外太空探索过程中的壮观历史和奇观。并通过现代化教学片和电脑模拟技术目睹难得一见的壮观太空探索历程和宏大的航天奇观，包括运载火箭、人造卫星、航天飞机、空间站、宇宙飞船、太空舱、航天器、月球车、太空座椅、航天服等。还可以学习到一些航天工程中主要的科技知识，如空间往返、对接技术、冗余技术、软着陆技术、回收技术、登月技术、载人航天技术、太空行走、太空食品、失重、太空课堂等。课程中还介绍了一些航天科学家的风采，如万户、钱学森、齐奥尔科夫斯基、哥达德、布劳恩等。本课程致力于文理互补、开阔学生视野，以通俗易懂、图文影视并貌的方法向学生展示一幅从火箭的发明到载人航天以及人类登月约一千多年的航天科技的壮观发展过程。富于趣味性、真实性、科学性，知识性。开阔学生视野，激发学习兴趣，领略宇宙万物的魅力，培养科学素养。本课程通过现代化教学手段教学，给人带来强烈的视觉震撼。

Course Description

Course Code: 1713602700

Course Name: ASTRONAVIGATION AND SHENZHOU SPACESHIPS

Credit/Hours: 2/32

Textbooks: Zheng Xiaohong, Yu Ying. Introduction to Astronautics. Posts & Telecom Press, 2013

Reference Books: Wang Yun. Introduction to Aeronautics and Astronautics. Beihang University Press, 2009

Course Description:

ASTRONAVIGATION AND SHENZHOU SPACESHIPS introduces the magnificent history from the beginning of the rockets to man-carried astronavigation. Using simulating technology in computer, we present a lot of brilliant scenes in the astronavigation such as rocket launcher, an made satellite, space shuttle, space station, spaceship, capsule, spacecraft, lunar rover vehicle, space suit and so on. We also introduce some knowledge concerning roundvoyage, butt junction, redundant technique, soft landing, lunar excursion, manned space flight, space walk, space foods, gravity-free condition, space classes, etc. We also give a glimpse of some famaous scientists in the field including Wan Hu, Qian Xuesen, Ziolkovsky, Godade, Braun, etc. The course is aimed at enlarging students' scope of knowledge and presenting the process of the astronavigational science and technology in an easily-understood and multimedia way. The characteristics of the course are interesting, true, scientific and knowledgeable. Students can learn knowledge of the astronavigation in an interesting way. We use CAI to give students an impressive feel.