

## Class Syllabi

### ***EPSS 288C***

Seminar in Space Physics

Hour-long lectures in Solar, Terrestrial and Planetary Physics covering magnetic fields and space plasmas

### ***EPSS 293C***

Seminar reviewing current space science literature, one hour

### ***EPSS 296A, B, C***

Research group meeting, three hour discussion of recent research and the relevant literature

## **EPSS 154 - Solar Terrestrial Physics**

<u>Lecture</u>	<u>Topic</u>
1	The Increasing Awareness of the Sun's Effects on the Earth
2	The Age of Exploration/Physics of the Earth's Upper Atmosphere
3	Photoionization and the Earth's Ionosphere
4	The Sun
5	The Corona, Solar Cycle
6	The Solar Wind
7	The Interplanetary Magnetic Field, Solar Wind
8	Interplanetary Interactions
9	The Physics of Plasmas: Part 1
10	The Physics of Plasmas: Part 2/Guiding Center to Adiabatic Invariants
11	Boltzmann Equation to MHD
12	MHD Including Waves
13	Solar Wind Interaction with Magnetized Obstacles
14	Solar Wind Interaction with Unmagnetized Obstacles
	MIDTERM
15	Collisionless Shocks
16	Solar Wind Magnetosphere Coupling 1
17	Solar Wind-Magnetosphere Coupling 2
18	Planetary Magnetospheres
19	The Inner Magnetosphere 1
20	The Auroral Ionosphere 1
21	The Auroral Ionosphere 2
22	Waves in Plasmas 1
23	Waves in Plasmas 2
24	Waves in Plasmas 3
25	REVIEW SESSION
26	REVIEW SESSION

## EPSS 200C – Space Plasma Physics

<u>Lecture</u>	<u>Topic</u>
1	The Increasing Awareness of the Sun's Effects on the Earth
2	The Age of Exploration/Physics of the Earth's Upper Atmosphere
3	Photoionization and the Earth's Ionosphere
4	The Sun
5	The Corona, Solar Cycle
6	The Solar Wind
7	The Interplanetary Magnetic Field, Solar Wind
8	Interplanetary Interactions
9	The Physics of Plasmas: Part 1
10	The Physics of Plasmas: Part 2/Guiding Center to Adiabatic Invariants
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14	Solar Wind Interaction with Unmagnetized Obstacles
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17	Solar Wind-Magnetosphere Coupling 2
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19	The Inner Magnetosphere 1
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21	The Auroral Ionosphere 2
22	Waves in Plasmas 1
23	Waves in Plasmas 2
24	Waves in Plasmas 3
25	REVIEW SESSION
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