




Opportunities in The Sciences


Janet K. Allen
John and Mary Moore Chair
Industrial Engineering
University of Oklahoma
Norman, OK 73019



The Sciences



- **Biology**
- **Chemistry and Biochemistry**
- **Earth and Atmospheric Science**
- **Mathematics**
- **Physics**
- **Psychology**
- **Astronomy**
- **Etc.**
- **Building you own major (not recommended)**





What Scientists Do

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Get a clear understanding of how things work.

- Assess and evaluate
- Create new knowledge
- Teach/communicate
- Applied versus theoretical work
- Experimental work

What do you do?

- Need very detailed understanding of specific discipline - we know a lot now and to be at the cutting edge you have to learn the foundations well
- Generally advances are coming at the boundaries of disciplines. Need understanding of several disciplines.
- People work in groups now - communication is very important
- Generally a scientist works to understand a problem and someone else - a doctor or an engineer fixes the problem



What Kinds of Jobs are Available?

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BS/MS

- Evaluate existing situations - environment, medical, psychology, etc.
- Laboratory investigations working with PhD/MD
- Teaching K-12

PhD

Academia

- Research organizations
 - Government Labs
 - Industrial Labs
 - Independent consulting
 - PhD with MD, MBA, JD
- Public Policy

There will be MANY Opportunities if you have done well.





What to Do in High School?

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- **Thorough Background in all the Sciences Essential (the fields are merging)**
- **AP Sciences are good building blocks - but generally you will want more rigorous information**
- **Life Long Learning Essential for Success**



For More Information

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To find out what is involved in each field

www.collegeboard.com/csearch/majors_careers/profiles

NOTE lots of other useful information on this website





Janet K. Allen

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Work: 405-550-3969

Home: 405-527-0998

Janet.allen@ou.edu

<http://www.srl.gatech.edu/Members/jallen>

Dr. Janet K. Allen holds the John and Mary Moore Chair in Industrial Engineering at the University of Oklahoma, Norman. Her specialty is mechanical engineering design, especially in design and simulation. She also has a strong interest in the design-manufacture of evolving open systems and resource management. Dr. Allen received her Ph.D. in biophysics from the University of California, Berkeley, and her S.B. from MIT in life science; she is the author/co-author of more than 200 publications - two thirds are refereed. She is a Fellow of the American Society of Mechanical Engineers; Fellow of the American Heart Association and Fellow of the Council on Arteriosclerosis; Senior Member, American Institute of Aeronautics and Astronautics.

