



STUDENT LEARNING AND ANALYTICS AT MICHIGAN

January 18, 2013:

Degree Compass: A Course Recommendation System

Tristan Denley, Provost
Austin Peay State University
Clarksville, Tennessee



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STUDENT LEARNING AND ANALYTICS AT MICHIGAN

www.crlt.umich.edu/slam

Predictive Analytics and Bespoke Curricula



Tristan Denley

Provost and Vice President for Academic Affairs

Austin Peay State University

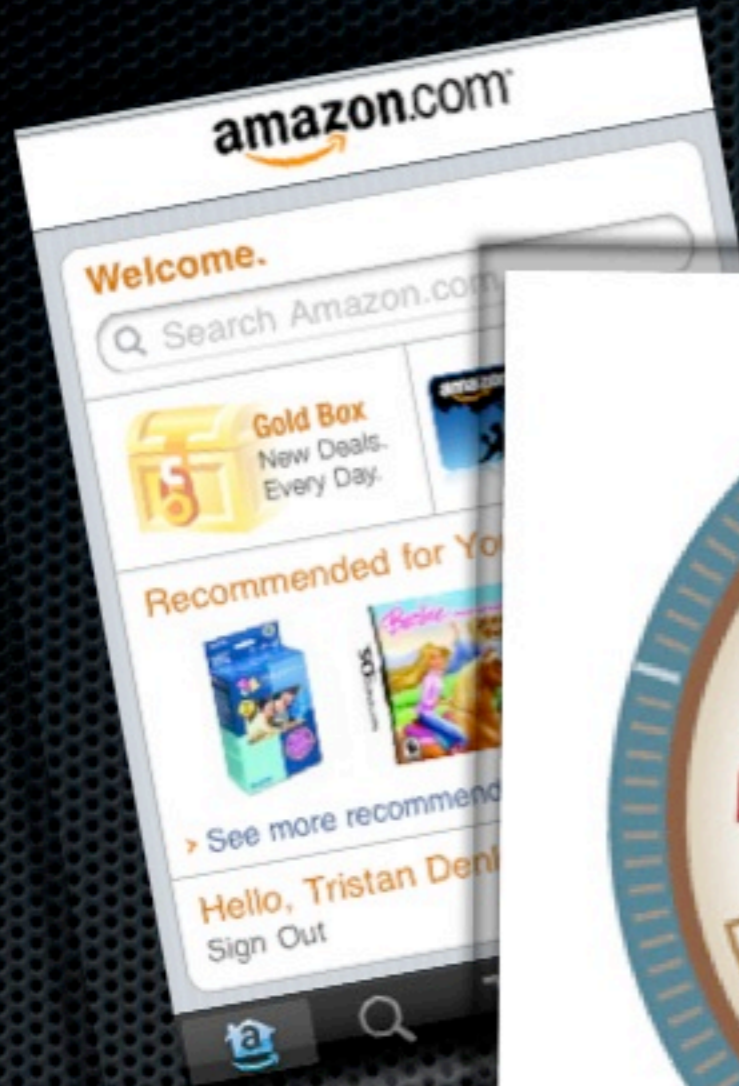
denleyt@apsu.edu

[Twitter: @TDenley](https://twitter.com/TDenley)









Course Suggestions for You from **THE GOV**:

You may not need to take all of the courses listed to graduate but each of the courses listed satisfies one of your degree requirements. When several courses might satisfy a degree requirement, the rating and projected grade may be helpful in selecting which course to choose. Please consult your Advisor or degree evaluation for specific program requirements.

Your Major: Business with concentrations in General Business and Management
Your Advisor: None



Category View

Highest Rated

AREA: General Business Concentration

GROUP RATING	TITLE	CO-REQUISITE	AVAILABILITY
★★★★☆	ACCT 2010 - Principles of Accounting I ⓘ		View Sections
★★★★☆	BLAW 3300 - Soc Legal and Pol Environ		View Sections
★★★★☆	MGT 3010 - Prin Mgt and Org Behavior		View Sections
★★★★☆	ACCT 2020 - Principles of Accounting II ⓘ		View Sections
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★★★★☆	MGT 4810 - Strategic Management		View Sections
★★★★☆	FIN 3010 - Principles of Finance		View Sections



**SUNGARD
BANNER**





- ✦ Global centrality
- ✦ Major centrality
- ✦ Grade prediction

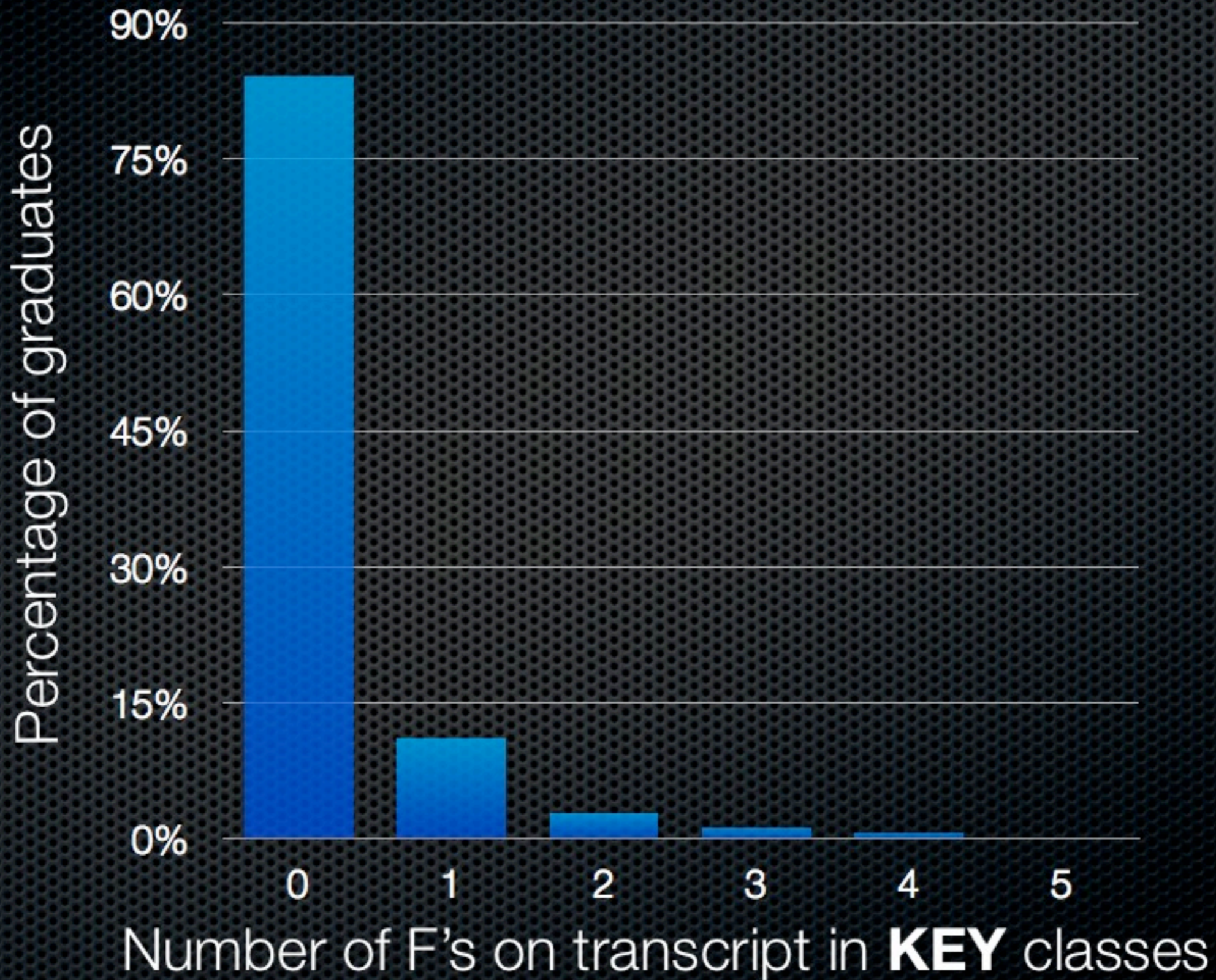


Physics Key Classes

Semester 1	Semester 2	Semester 3	Semester 4
PHYS 2110	PHYS 2120	PHYS 3550	PHYS3005
PHYS 2111	PHYS 2121	MATH 2110	PHYS 3700
MATH 1910	MATH 1920	CSCI 2000	MATH 3110



Graduates' Transcript Analysis



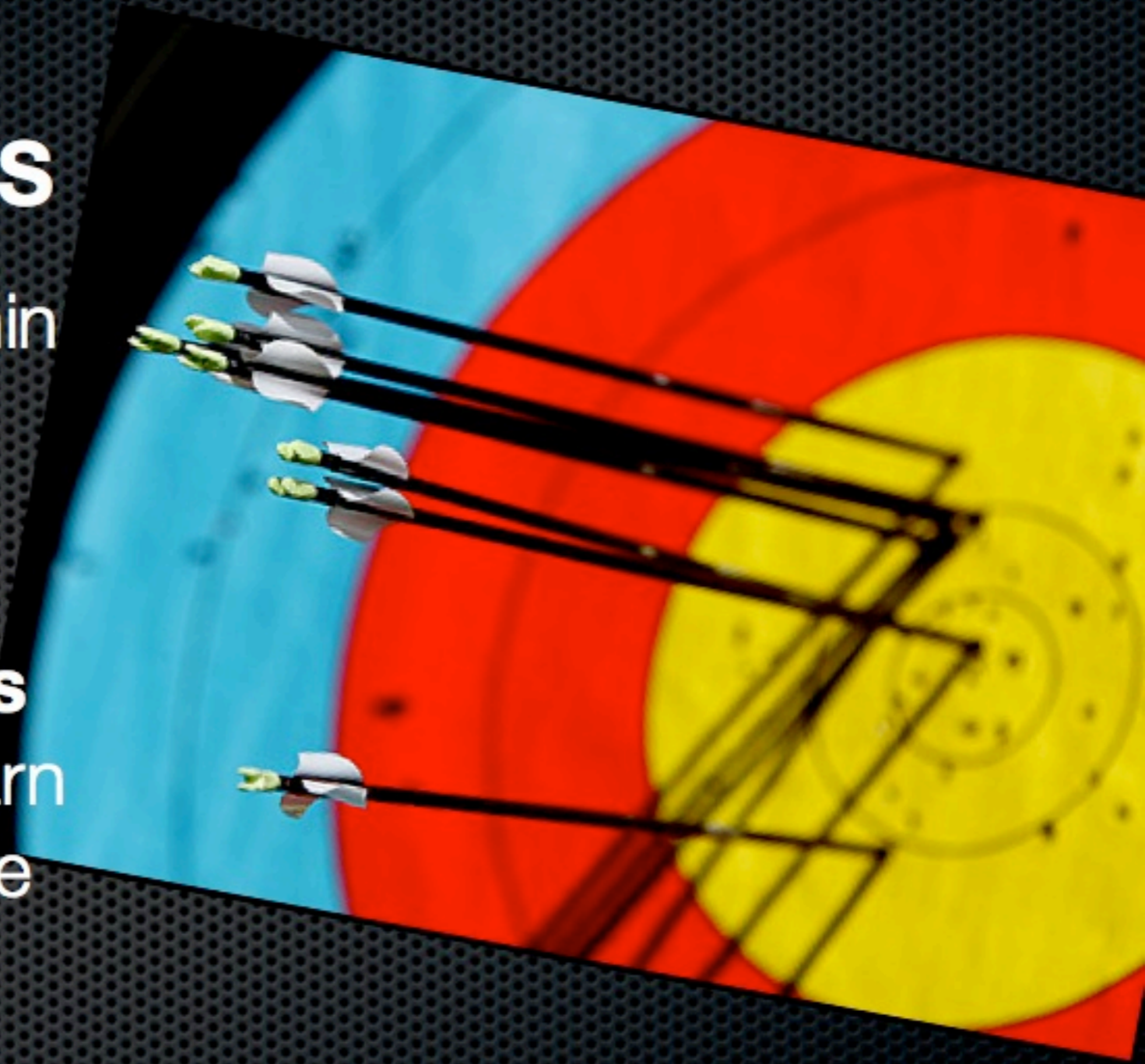


What ingredients go into the ratings

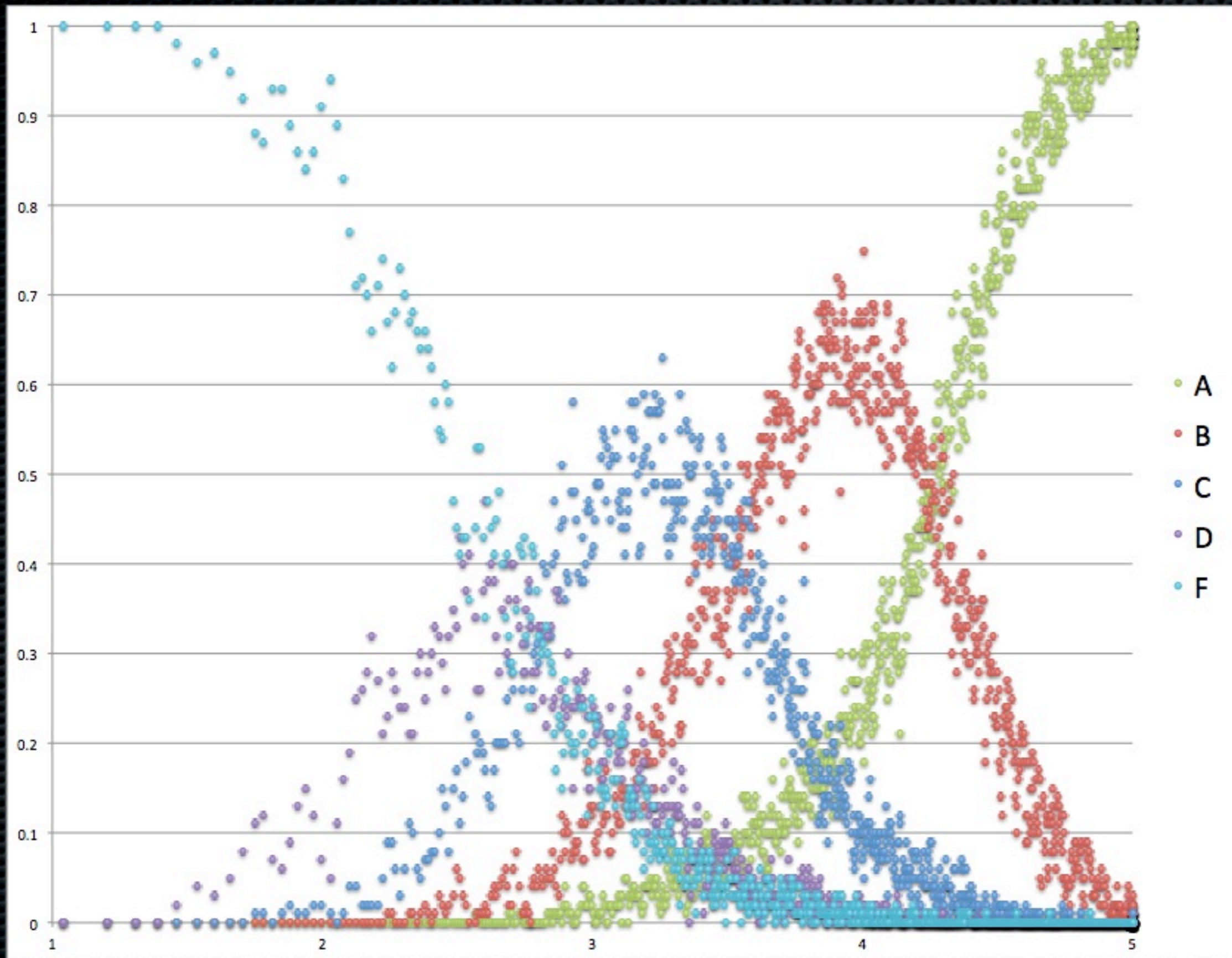
- ✪ Global centrality
- ✪ Major centrality
- ✪ Grade prediction

GRADE PREDICTIONS

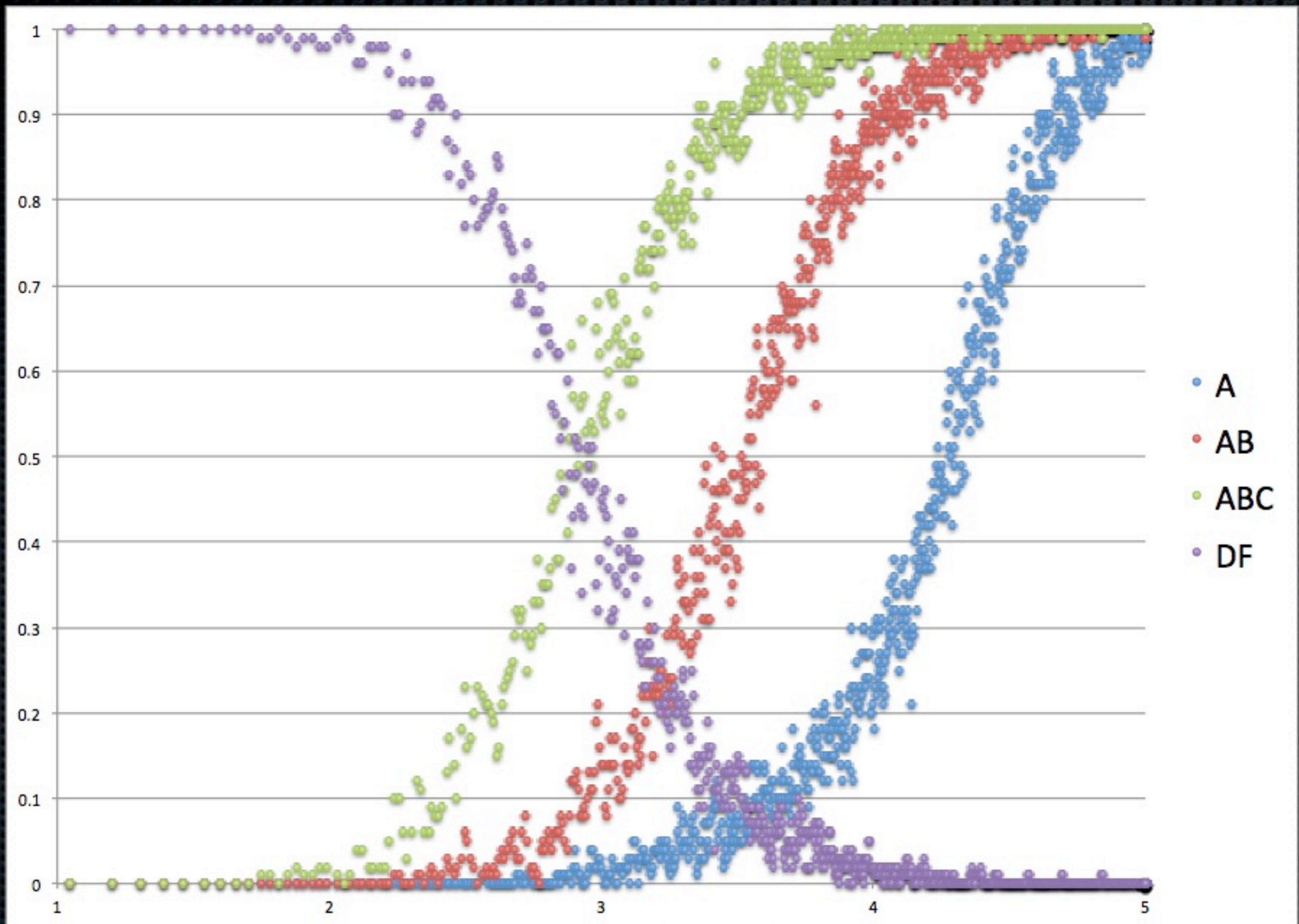
- **Predicts grades** to within **0.6** of a letter grade on average
- **Correctly distinguishes** whether a student will earn an ABC or DF **92%** of the time



Comparing **actual** grades to **predicted** grades



Comparing **actual** grades to **predicted** grades





Five Star Course



- ✱ Global centrality
- ✱ Major centrality
- ✱ Grade prediction

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★★★★★	MGT 4810 - Strategic Management		View Sections
★★★★★	FIN 3010 - Principles of Finance		View Sections

Spring Term I 2011 - Ft Campb

Available	Class Section	Class CRN	Instructor	Credit Hours	Time	Days	Campus	Location	Instructional Method	Start Date	End Date	Capacity	Seats Open	Seats Filled
Available	50	108	Esquin, June	3	08:30 am - 11:00 am	MW	Austin Peay Ctr at Ft Campbell	FC Education Center 1110	Conventional Methodology	01/08/2011	03/04/2011	30	21	9
Available	51	109	Carver, Sylvia	3	08:30 am - 11:00 am	TR	Austin Peay Ctr at Ft Campbell	FC Education Center 1110	Conventional Methodology	01/08/2011	03/04/2011	30	9	21
Available	58	110	Scudder, William	3	07:30 pm - 10:00 pm	MW	Austin Peay Ctr at Ft Campbell	FC Education Center 1110	Conventional Methodology	01/08/2011	03/04/2011	30	22	8
Unavailable	W1A	111	Breckling, Molly	3	TBA - TBA	TBA	Austin Peay Ctr at Ft Campbell	TBA	WEB-Asynchronous	01/08/2011	03/04/2011	30	0	30
Available	W2A	112	Repass, Deidre	3	TBA - TBA	TBA	Austin Peay Ctr at Ft Campbell	TBA	WEB-Asynchronous	01/08/2011	03/04/2011	30	5	25
Available	56	238	Scudder, William	3	04:45 pm - 07:15 pm	MW	Austin Peay Ctr at Ft Campbell	FC Education Center 1110	Conventional Methodology	01/08/2011	03/04/2011	30	21	9

Spring Semester 2011

Available	Class Section	Class CRN	Instructor	Credit Hours	Time	Days	Campus	Location	Instructional Method	Start Date	End Date	Capacity	Seats Open	Seats Filled
Available	00	1642	Mcintosh, Joann	3	06:55 am - 07:50 am	MWTF	Austin Peay, Main Campus	Music Mass Comm Bldg 237	Conventional Methodology	01/13/2011	05/06/2011	40	13	27
Available	01	1643	Zylo, Jeanette	3	08:00 am - 08:55 am	MWTF	Austin Peay, Main Campus	Music Mass Comm Bldg 237	Conventional Methodology	01/13/2011	05/06/2011	40	4	36
Unavailable	06	1645	Ritter, Michael	3	09:35 am - 11:00 am	TR	Austin Peay, Main Campus	Music Mass Comm Bldg 237	Conventional Methodology	01/13/2011	05/06/2011	40	0	40
Unavailable	11	1646	Carver, Sylvia	3	01:25 pm - 02:20 pm	MWTF	Austin Peay, Main Campus	Music Mass Comm Bldg 237	Conventional Methodology	01/13/2011	05/06/2011	40	0	40
Unavailable	69	1648	Steffen, Richard	3	12:20 pm - 01:15 pm	MWTF	Austin Peay, Main Campus	Music Mass Comm Bldg 237	Conventional Methodology	01/13/2011	05/06/2011	40	-1	41



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★★★★★	BLAW 3220 - Business Law II	
★★★★★	MIS 4100 - Management Info System	
★★★★★	MGT 4810 - Strategic Management	
★★★★★	FIN 3010 - Principles of Finance	

Degree Compass

AREA: General Education Requirements

GROUP: Communications

GROUP RATING	TITLE	COURSE CO-REQUISITE	COURSE (view sections)
★★★★★	COMM 1010 - Fund of Public Speaking		View Sections

GROUP: History

GROUP RATING	TITLE	COURSE CO-REQUISITE	COURSE (view sections)
★★★★★	HIST 2020 - American History II		View Sections
★★★★★	HIST 2030 - History of Tennessee		View Sections

GROUP: Humanities Core

GROUP RATING	TITLE	COURSE CO-REQUISITE	COURSE (view sections)
★★★★★	MUS 1030 - Music Appreciation		View Sections
★★★★★	ENGL 2030 - Traditions in World Literature		View Sections
★★★★★	THEA 1030 - Intro to Theatre		View Sections
★★★★★	PHIL 1030 - Intro to Philosophy		View Sections
★★★★★	MUS 2030 - World Music		View Sections
★★★★★	PHIL 2200 - Religion and the World		View Sections
★★★★★	PHIL 1040 - Intro to Ethics		View Sections

GROUP: Natural Science core

GROUP RATING	TITLE	COURSE CO-REQUISITE	COURSE (view sections)
★★★★★	BIOL 2010 - Human Anat and Physiology	BIOL2011	View Sections
★★★★★	GEOL 1041 - Physical Geology Lab	GEOL1040	View Sections
★★★★★	GEOL 1040 - Physical Geology	GEOL1041	View Sections
★★★★★	BIOL 2011 - Human Anat and Phys Lab	BIOL2010	View Sections

Course Suggestions for You from THE GOV:

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Your Major: Business with concentrations in General Business and Management
Your Advisor: [Grimmett, David R.](#)


[Category View](#)
[Highest Rated](#)

AREA: General Business Concentration

GROUP RATING	TITLE	COURSE CO-REQUISITE	COURSE (view sections)
★★★★★	BLAW 3300 - Soc Legal and Pol Environ		View Sections
★★★★★	ACCT 2020 - Principles of Accounting II		View Sections
★★★★★	MKT 3010 - Principles of Marketing		View Sections
★★★★★	MGT 3010 - Prin Mgt and Org Behavior		View Sections
★★★★★	FIN 3010 - Principles of Finance		View Sections
★★★★★	BLAW 3210 - Business Law I		View Sections
★★★★★	MIS 4100 - Management Info System		View Sections
★★★★★	MGT 4810 - Strategic Management		View Sections
★★★★★	BLAW 3220 - Business Law II		View Sections
★★★★★	DSCI 3410 - Production Operations Mgmt		View Sections

AREA: General Education Requirements

GROUP: Communications

COURSE CO-	COURSE
------------	--------

VS

204 College of Science and Mathematics

CHEM 3510	Organic Chemistry	4
CHEM 3520	Organic Chemistry	4
CHEM 3610	Physical Chemistry	4
CHEM 3620	Physical Chemistry	4
CHEM	Chemistry Elective	4

Credit Hours
20

FORENSIC CHEMISTRY MINOR

This minor is designed to meet the minimum requirements for a student to attend a graduate program in forensic science or to apply for a position in a forensic science laboratory (although each program may have additional requirements).

CHEM 1110	General Chemistry	5
CHEM 1120	General Chemistry	5
CHEM 3210	Quantitative Analysis	4
CHEM 3700	Forensic Science	3
CHEM 3220	Instrumental Analysis	4
or		
CHEM 3440	Inorganic Chemistry	4
CHEM 3500	Brief Organic Chemistry	4
or		
CHEM 3510	Organic Chemistry	4
BICL 3940	Fundamentals of Clinical Analysis	4
or		
BICL 4450	Biotechnology	4

CHEMISTRY - Teaching (B.S.)

Students who complete the prescribed courses are eligible to become licensed to teach chemistry and general science in grades 7-12. (Student teaching is required for licensure.) An additional science endorsement may be obtained with advisor approval.

ACCREDITATION

The Chemistry Department received accreditation by the American Chemical Society (ACS) in 1991 and continues its commitment to maintaining this accreditation.

General Education (see TBR Common Core)	Credit Hours	41
University-Wide Freshman Seminar Requirement		1
Lower Division Major Requirements	33-37	
CHEM 1110	General Chemistry	5
CHEM 1120	General Chemistry	5



These recommendations increase flexibility and awareness of alternatives as part of an advising conversation, whilst helping students make plans for the future.

THE DATA SO FAR . . .

- 7% more students make an A or B in recommended courses than in courses not recommended to them.
- **ABC%** in Fall 2012 courses **5.3SD higher** than Fall 2010 courses campus-wide.
- **ABC%** in Fall 2012 courses **7.7SD higher** than Fall 2010 for Pell Grant recipients.



BILL & MELINDA
GATES *foundation*

COMPLETE COLLEGE
AMERICA



THE UNIVERSITY OF
MEMPHIS®

THE UNIVERSITY of TENNESSEE **UT**
CHATTANOOGA

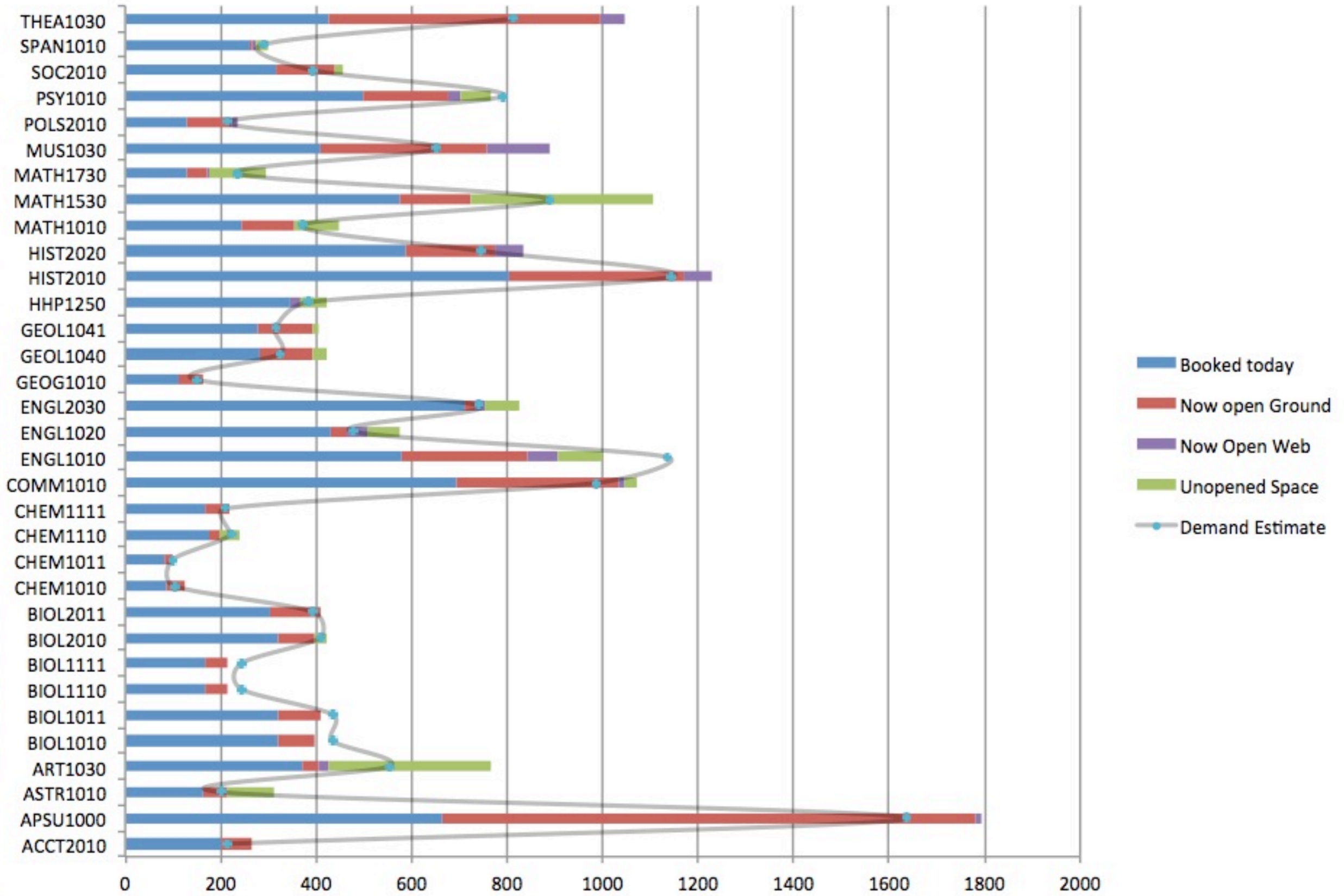




Schedule Building is
Critical



Students should take
the courses they **need**
not what's left over

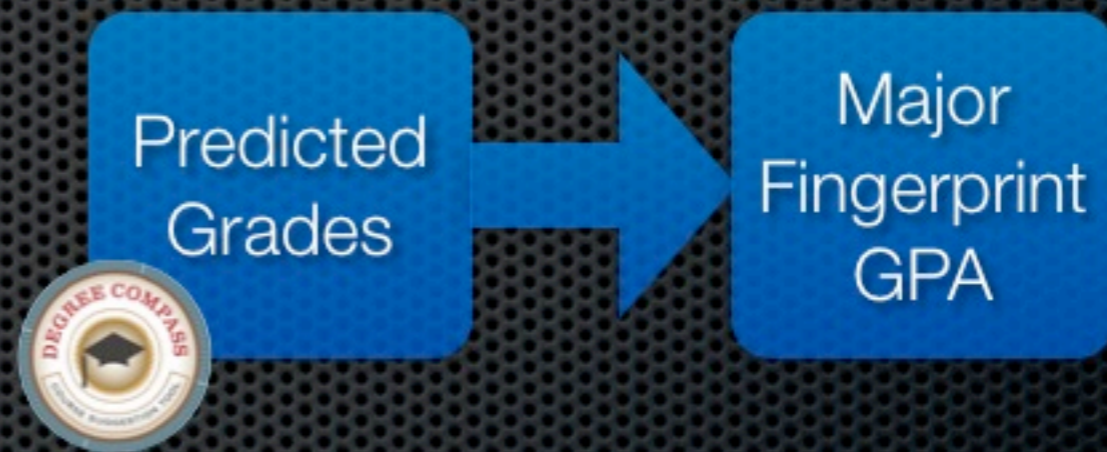




WHAT ABOUT MAJORS?



Fingerprint Courses
capture the distinctive
flavour of each major



MYFUTURE

FIND A MAJOR FIND A CAREER





Everything you need...one stop.

Welcome Sophomore B GOV

My Account
Content Layout



My Major Other Majors

Business ★★★★★

Our undergraduate Bachelor of Business Administration (B.B.A.) program is designed to build your academic knowledge and practitioner experience. You can choose one of the seven academic concentrations: accounting, economics, finance, general business, international management, management, or marketing. To take you beyond the classroom and the textbook, we encourage networking and professional relationship development through internships in organizations and businesses. The College's student organizations (Sigma Beta Delta honor society, Alpha Kappa Psi professional fraternity, and the Institute for Management Accountants) create opportunities to hear and meet regional business leaders. The College's Business Advisory Board opens doors in Nashville and the Southeast United States through our successful and engaged alumni.

Whom Do I Contact?

Department: Accounting Finance and Econ
<http://www.apsu.edu/business>
Chair: William Rupp
Phone:(931)221-7674
Campus Location: Kimbrough 104

What Jobs Would I Be Qualified For?

- Business Teachers, Postsecondary
- Public Relations Specialists
- Copy Writers
- Sales Agents, Securities and Commodities
- Bookkeeping, Accounting, and Auditing Clerks
- Advertising and Promotions Managers
- Marketing Managers
- Treasurers and Controllers
- Financial Managers, Branch or Department
- Training and Development Managers
- Market Research Analysts and Marketing Specialists
- Accountants
- Auditors
- Budget Analysts
- Financial Analysts
- Financial Examiners

Degree Options in Business

- General Business
- International Management
- Management
- Marketing

Four-Year Curriculum Plans



MYFUTURE

FIND A MAJOR FIND A CAREER





Everything you need...one stop.

Welcome Sophomore B GOV

My Account
Content Layout



My Major

Other Majors

Recommended Majors

Special Education



The Special Education major (K-12 Comprehensive and Modified) requires the Professional Education minor for students who seek teacher licensure. If teacher licensure is not desired, the education minor must be chosen. Contact College of Education for availability of non-licensure program.

Agriculture



The Department of Agriculture at Austin Peay State University is part of the College of Science and Mathematics. The department, including faculty offices and classrooms, is housed in the Sundquist Science Complex. The department currently has three full-time faculty members and three adjunct faculty members, with approximately 130 agriculture majors including those in the pre-professional programs. The department oversees the 475-acre Environmental Education Center, which is located three miles...
[Read more](#)

Art



The Department of Art's vision is to provide a structured, creative environment that enables students to ask questions, solve problems, and take risks as they gain the knowledge, skills, and attitudes for a meaningful and productive life as global citizens.

MYFUTURE

FIND A MAJOR FIND A CAREER





Everything you need...one stop.

Welcome Sophomore

MY NEXT MOVE

Animal Scientists

What they do: Conduct research in the genetics, nutrition, reproduction, growth, and development of domestic farm animals.

- On the job, you would:**
- Communicate research findings to the scientific community, producers, and the public.
 - Study effects of management practices, processing methods, feed, or environmental conditions on quality and quantity of animal products, such as eggs and milk.
 - Conduct research concerning animal nutrition, breeding, or management to improve products or processes.

KNOWLEDGE

- Math and Science**
 - biology
 - arithmetic, algebra, geometry, calculus, or statistics
- Arts and Humanities**
 - English language
- Manufactured or Agricultural Goods**
 - food production
- Education and Training**
 - teaching and course design

SKILLS

- Basic Skills**
 - reading work related information
 - using scientific rules and strategies to solve problems
- Problem Solving**
 - noticing a problem and figuring out the best way to solve it
- People and Technology Systems**
 - thinking about the pros and cons of different options and picking the best one
 - figuring out how a system should work and how changes in the future will affect it

ABILITIES

- Verbal**
 - read and understand what is written
 - communicate by speaking
- Ideas and Logic**
 - notice when problems happen
 - use rules to solve problems
- Attention**
 - pay attention to something without being distracted
- Math**
 - add, subtract, multiply, or divide

PERSONALITY

- People interested in this work like activities that include **ideas, thinking,** and figuring things out.
- They do well at jobs that need:
- Integrity
 - Analytical Thinking
 - Attention to Detail
 - Dependability
 - Initiative
 - Independence

TECHNOLOGY

- You might use software like this on the job:
- Analytical or scientific software**
 - Deoxyribonucleic acid DNA sequence analysis software
 - Nutrition Balance Analyzer NUTBAL
 - Data base user interface and query software**
 - DAGRES
 - Domestic Animal Diversity Information Service DAD-IS
 - Spreadsheet software**
 - Microsoft Excel

EDUCATION

doctoral/professional degree or master's degree usually needed

Get started on your career:

- Find training
- Find qualifications

JOB OUTLOOK

Average

New job opportunities are likely in the future.

SALARY: \$61,230 per year, on average

- Check out the future
- Learn training info
- Find jobs

EXPLORE MORE

- [Agricultural Technicians](#)
- [Animal Breeders](#)
- [Biologists](#)
- [Dietitians & Nutritionists](#)
- [Soil & Plant Scientists](#)

You might like a career in one of these industries:

- Education
- Government
- Self-Employed
- Professional, Science, & Technical

← Back to My Major

Agriculture

What if this were my major?

The Department of Agriculture at AP University is part of the College of Agriculture, Mathematics, and Science. The department and classrooms, is housed in the Agriculture Complex. The department consists of 15 faculty members and three graduate assistants with approximately 130 agricultural students in the pre-professional program. The department oversees the 475-acre Environmental Center which is located three miles from campus. EEC is used by the department for field trips, and land-judging contests. The department also oversees the agriculture industries also are used for learning activities. A 27-passenger aircraft, is maintained and operated for field trips.

Whom Do I Contact?

Department: Agriculture
<http://www.apsu.edu/agriculture/>
Chair: Donald Sudbrink
Phone:(931)221-6455
Campus Location: SSC D-232

My Account Content Layout

- LiveMail
- D2L
- Groups
- Logout

November 6, 2011

MYFUTURE

FIND A MAJOR FIND A CAREER



Tristan Denley

Provost and Vice President for Academic Affairs

Austin Peay State University

denleyt@apsu.edu

Twitter: [@TDenley](https://twitter.com/TDenley)

[http://www.apsu.edu/academic-affairs/
degree-compass-and-my-future](http://www.apsu.edu/academic-affairs/degree-compass-and-my-future)