

2016 Spring Faculty-to-Faculty Conference – April 15, 2016

NOTES – Afternoon Breakout Session: STAAs/DwDs – Inappropriate Math Requirements

Additional Notes: (Not necessarily in order of importance) Bulleted summary follows

MAT 121 (College Algebra) should have one purpose: Prep for Calculus. Programs requiring College Algebra should (also) require Calculus. Students in College Algebra going into Calculus need solid prep, many terminal students in College Algebra, though. Restricting College Algebra to stem would improve the CA course.

Clarify all course numbers with course titles.

Background on how DwD's arise; Context is: What does a student entering need in order to enter your program at the Junior Level?

Generalizations:

- Students over-advised into College Algebra when another course would better serve.
 - 2 year schools choose College Algebra as a safe bet for students
 - Long path through the math requirements for [Criminal Justice for example]
- For example would Western State be comfortable to change Anthropology to “Any”?
- (Second issue – to be accurate there may be a particular course eg stats)
- The point is for disciplines to be intentional about their choice of math

This conversation belongs in the partner disciplines, has already started.

Clean this up by using an asterisk – any gT math *unless you are going to College X*

Logistically, how do we do this? [Maia] interacts with the DwD's in stages. Do we contact the College/Discipline which have the [College Algebra] requirement to check if this is really what they need? Should course objectives be included in this communication?

“Instead of using CA as a weed out, a big shift in thinking to “using [stats] as a feeder”

At last (Math Pathways Conference) discussion about abolishing College Algebra at Boulder.

Some areas believe College Algebra is the weed out course/ “IQ test” These disciplines might be better served creating a weed out course in their own discipline.

How does the Math Modeling course fit into this discussion?

Question: can we say for example: “Any gT math, Recommend Stats?” (probably)

Which disciplines stick out? Request [Maia] contact these:

(Can we get the other disciplines to drive interest in Modeling Course?)

Anthropology – Western State & UCD (& Fort Lewis?)

Business may not be “low-lying fruit” (but maybe suggest all business programs requiring College Algebra” use “Business Calculus”?) Business is “too big”

Business seems too broad – Different business majors need different math. The problem is that it is one Dwd. The majors are too diverse for one Dwd. But Community College students may not know which area they are going into. May be the math that causes them to change.

Criminal Justice: UNC

Geography: Adams State

Psychology - BA: (Should be Stats for all): Western State, Boulder (?), UCCS

1. College Algebra is a Calculus Prep course. Any program requiring College Algebra should also be requiring Calculus.
2. Students are now over-advised into College algebra, almost as an after-thought.
3. Looking for a shift in thinking from College Algebra as a “weeder” course to statistics as a feeder course.
4. Instead of “Any gT math course” would prefer disciplines to specify a course or at least give a “recommended” course.
5. Can we get someone at CDHE to re-contact schools mentioned above in the “low-lying fruit”
6. How does the proposed Math Modeling course fit into this discussion?

STAA/Dwd Math Requirements

The following STAA/Dwd’s were identified by the [Colorado Math Pathways Task Force](#) as potentially having an inappropriate GT Pathways math requirement. The short-term recommendation from the Task Force and the faculty & department chair participants at the March 28, 2016 Colorado Math Pathways Conference is to **change the math requirement for these STAA/Dwd’s to “Any GT Pathways**

mathematics course (GT-MA1). Prefer MAT 120: Mathematics for the Liberal Arts” and footnote the institutions that have a specific requirement or preference. The long-term recommendation for those departments that require a specific math course is to determine if their current requirement is the best math preparation for that major.

A √ indicates the program faculty has confirmed its math requirement.

Anthropology – Requires MAT 121: College Algebra

Institution and Major	Gen Ed Math Requirement by the Department
Colorado State University-Ft Collins [B.A. Anthropology]	Any √
Fort Lewis College [B.A. Anthropology]	Prefers MATH132 – Intro to Stats √
Metropolitan State University of Denver [B.A. Anthropology]	Any √
University of Colorado Boulder [B.A. Anthropology]	Any √
University of Colorado Colorado Springs [B.A. Anthropology]	Any √
University of Colorado Denver [B.A. Anthropology]	MAT 121: College Algebra or 135: Intro to Statistics √
University of Northern Colorado [B.A. Anthropology]	Any √
Western State Colorado University [B.A. Anthropology]	College Algebra √

Business – Requires MAT 121: College Algebra OR MAT 123: Finite Math OR MAT 125: Survey of Calculus or higher

Institution and Major	Gen Ed Math Requirement by the Department
Adams State University	
<i>B.A. Business Administration; emphasis in Advertising</i>	Any √
<i>B.A. Business Administration; emphasis in Business Teacher Education</i>	Any √
<i>B.A. Business Administration; emphasis in General Business</i>	Any √
<i>B.A. Business Administration; emphasis in International Business</i>	Any √
<i>B.S. Business Administration; emphasis in Accounting</i>	Any √
<i>B.S. Business Administration; emphasis in Agribusiness</i>	Any √
<i>B.S. Business Administration; emphasis in Economics</i>	Any √
<i>B.S. Business Administration; emphasis in Finance</i>	Any √
<i>B.S. Business Administration; emphasis in General Business</i>	Any √
<i>B.S. Business Administration; emphasis in Health Care Administration</i>	Any √
<i>B.S. Business Administration; emphasis in Management</i>	Any √
<i>B.S. Business Administration; emphasis in Management Information Systems</i>	Any √

<i>B.S. Business Administration; emphasis in Small Business Management</i>	Any √
Colorado Mesa University	√
<i>Bachelor of Business Administration (B.B.A.); concentration in Business Economics</i>	Business Calculus
<i>Bachelor of Business Administration (B.B.A.); concentration in Emerging Markets</i>	College Algebra
<i>Bachelor of Business Administration (B.B.A.); concentration in Energy Management/Landman</i>	College Algebra
<i>Bachelor of Business Administration (B.B.A.); concentration in Entrepreneurship</i>	College Algebra
<i>Bachelor of Business Administration (B.B.A.); concentration in Finance</i>	Business Calculus
<i>Bachelor of Business Administration (B.B.A.); concentration in Hospitality Management</i>	College Algebra
<i>Bachelor of Business Administration (B.B.A.); concentrations in Human Resource Management</i>	College Algebra
<i>Bachelor of Business Administration (B.B.A.); concentration in Information Systems</i>	College Algebra
<i>Bachelor of Business Administration (B.B.A.); concentration in Insurance</i>	College Algebra
<i>Bachelor of Business Administration (B.B.A.); concentration in Management</i>	College Algebra
<i>Bachelor of Business Administration (B.B.A.); concentration in Managerial Informatics</i>	College Algebra
<i>Bachelor of Business Administration (B.B.A.); concentration in Marketing</i>	College Algebra
Colorado State University-Ft Collins [<i>B.S. Business Administration</i>]	Calculus in Management Sciences. CC students should take MAT 125: Survey of Calculus √
Colorado State University-Global Campus [<i>B.S. Business Management</i>]	MATH 410: Quantitative Business Analysis (CSU-Global class)
<i>B.S. Accounting</i> <i>B.S. Healthcare Administration and Management</i> <i>B.S. Human Resource Management</i> <i>B.S. Information Technology Management</i> <i>B.S. Management Information Systems and Business Analytics</i> <i>B.S. Marketing</i> <i>B.S. Project Management</i>	Any
Colorado State University-Pueblo [<i>B.S. Business Administration; majors in Management, Accounting or Economics</i>]	MAT 121 or 125 √
Fort Lewis College [<i>B.A. Business Administration; Business Administration option</i>]	MATH132- Intro to Stats √
Metropolitan State University of Denver	
<i>B.S. Accounting</i>	Finite Math for Mgmt and Social Science or College Algebra √

<i>B.S. Computer Information Systems</i>	Finite Math for Mgmt and Social Science or College Algebra √
<i>B.S. Finance</i>	Finite Math for Mgmt and Social Science or College Algebra √
<i>B.S. Management</i>	Finite Math for Mgmt and Social Science or College Algebra √
<i>B.S. Marketing</i>	Finite Math for Mgmt and Social Science or College Algebra √
University of Colorado Boulder [<i>B.S. Business Administration</i>]	Prefer Calculus for Social Science and Business [CCCS equivalent MAT 125 Survey of Calculus (GT-MA1)] but also accept regular calculus [CCCS equivalent MAT 201 Calculus I (GT-MA1)]. √
University of Colorado Colorado Springs [<i>B.S. Business; emphases in Accounting, Business Administration, Finance, Human Resources Management, Information Systems, International Business, Management, Marketing, PGA Golf Management, Service Management, or Sport Management</i>]	College Algebra √
University of Colorado Denver [<i>BS Business Administration; emphases in Accounting, Finance, Financial Management, Human Resources Management, Information Systems, International Business, Management, or Marketing</i>]	MAT 121, 123, or 125 √
University of Northern Colorado [<i>B.A. Business Administration; all emphases</i>]	College Algebra √
Western State Colorado University [<i>B.A. Business Administration</i>]	College Algebra or Pre-calculus or Calculus I √

Criminal Justice – Requires MAT 121: College Algebra

Institution and Major	Gen Ed Math Requirement by the Department
Colorado Mesa University [<i>B.A. Criminal Justice; Criminal Justice or Law Enforcement concentrations</i>]	Any √
Colorado State University-Global Campus [<i>B.S. Criminal Justice & Law Enforcement Administration</i>]	Any
Metropolitan State University of Denver [<i>B.S. Criminal Justice & Criminology</i>]	Any √
University of Colorado Colorado Springs [<i>B.A. Criminal Justice</i>]	Any √
University of Colorado Denver [<i>B.A. Criminal Justice</i>]	Any √
University of Northern Colorado [<i>B.A. Criminal Justice</i>]	MAT 135 √

Geography - – Requires MAT 121: College Algebra OR MAT 135: Introduction to Statistics

Institution and Major	Gen Ed Math Requirement by the Department
Adams State University [B.A. Earth Sciences; Physical Geography emphasis]	College Algebra √
University of Colorado Boulder [B.A. Geography]	Any √
University of Colorado Colorado Springs [B.A. Geography]	Any √
University of Colorado Denver [B.A. Geography]	MAT 121 or 135 √
University of Northern Colorado [B.A. Geography; Global & Area Studies or	Any √

Psychology, BA – Requires MAT 121: College Algebra

Institution and Major	Gen Ed Math Requirement by the Department
Adams State University [B.A. Psychology; Developmental, Clinical, Sport Psychology, or Psychology emphases]	Any √
Colorado Mesa University [B.A. Psychology; Psychology or Counseling Psychology concentrations]	Any √
Colorado State University-Pueblo [B.A. Psychology]	Any √ College Algebra recommended but not required
Fort Lewis College [B.A. Psychology]	MATH132- Intro to Stats √
Metropolitan State University of Denver [B.A. Psychology]	Any √
University of Colorado Boulder [B.A. Psychology]	College Algebra or higher as a pre-req to PSYC 2111: Psychological Science I: Statistics √
University of Colorado Colorado Springs [B.A. Psychology]	College Algebra Rex is confirming.
University of Colorado Denver [B.A. Psychology]	Any √
University of Northern Colorado [B.A. Psychology]	Any √
Western State Colorado University [B.A. Psychology]	College Algebra √

Psychology, BS – Requires MAT 121: College Algebra

Institution and Major	Gen Ed Math Requirement by the Department
Colorado State University-Ft Collins [B.S. Psychology; General Psychology concentration]	College Algebra or higher √
Colorado State University-Pueblo [B.S. Psychology]	Any √ College Algebra recommended but not required
University of Colorado Denver [B.S. Psychology]	MAT 121 (still under review) √

Sociology – Requires MAT 121: College Algebra OR MAT 135: Introduction to Statistics

Institution and Major	Gen Ed Math Requirement by the Department
Adams State University [<i>B.A. Sociology; Criminology or Social Welfare emphases</i>]	College Algebra recommended but not required √
Colorado Mesa University [<i>B.A. Sociology; Sociology concentration</i>]	Any √
Colorado State University-Ft Collins [<i>B.A. Sociology; General Sociology concentration</i>]	Any √
Colorado State University-Pueblo [<i>B.A. Sociology; B.S. Sociology</i>]	Any √
Fort Lewis College [<i>B.A. Sociology; Human Services-General option</i>]	Any √
Metropolitan State University of Denver [<i>B.A. Sociology</i>]	Any √
University of Colorado Boulder [<i>B.A. Sociology</i>]	Any √
University of Colorado Colorado Springs [<i>B.A. Sociology</i>]	Any √
University of Colorado Denver [<i>B.A. Sociology</i>]	MAT 121, 123, or 135 √
University of Northern Colorado [<i>B.A. Sociology; all emphases</i>]	MAT 135 recommended √
Western State Colorado University [<i>B.A. Sociology</i>]	Math for the Liberal Arts or College Algebra √