COLLEGE OF THE CANYONS

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Top Twenty Courses with Low Success Rates: Fall 2013, 2014, and 2015

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At the request of the Title V grant project team, the Office of Institutional Research, Planning and Institutional Effectiveness conducted an analysis of student success rates in courses across all disciplines. Related research conducted by the Office of Institutional Research, Planning, and Institutional Effectiveness includes Research Brief #47-*Top Twenty Courses with Historically Low Success Rates: Fall 2009, 2010 and 2011* (Parker, Meuschke, & Gribbons, 2013), *Supplemental Instruction Needs Assessment: Spring 2009* ad hoc report (Parker, et al. 2009), and Research Brief #77-*Top Twenty Courses with Low Success Rates: Fall 2011, 2012, and 2013* (Meuschke, Gribbons, & Parker, 2015). Many of the courses identified in the top 20 courses with historically low success rates in Research Brief #77 are also among the top 20 in the current analysis, including CIT-170, GMD-120, HIST-240, MUSIC-160, MATH-070, GERMAN-101, MATH-060, and COUNS-070.

Results from the current analysis are intended to inform offering plans for online tutoring support funded by the Title V grant.

Upon review of the results, the following observations were made:

- Top 20 courses with the historically lowest success rates were:

Course Section	Course Title
GENSTU-091	Individual Studies and Language Skills
HIST-240	Latin American Civilization
CIT-170	Web Site Development I
GENSTU-092	Individualized Learning Assistance
GERMAN-101	Elementary German
COUNS-142	Learning to Learn
HIST-170	Economic History of the United States
HUMAN-150	Great Books, Great Ideas
MATH-060	Elementary Algebra
MATH-070	Intermediate Algebra
GMD-120	History of Graphic Design
PHILOS-102	Introduction to Eastern Religion and Philosophy
MUSIC-160	Guitar Studies I
GENSTU-082	Individual Computer Applications
MATH-059	Algebra Preparation-Computer Assisted
ART-205	Landmarks of Art and Visual Culture
KPET-200	Introduction to Kinesiology
MATH-240	Math Analysis
MUSIC-105	Music Appreciation

Course Section	Course Title
COUNS-070	Becoming a Successful Distance Learning Student

- While English courses were not identified in the top 20 courses with the lowest success rates, four English courses had average success rates below 70 percent, including: Beginning Reading and Writing Skills (ENGL-071-not offered anymore), Intermediate Reading and Writing Skills (ENGL-081), Introduction to Technical Writing (ENGL-094), and Accelerated Preparation for College and Reading Writing (ENGL-096). The previous research study included ENGL-081 among courses with average success rates below 70 percent.

- Math courses among the top 20 courses with the lowest success rates include: Elementary Algebra (MATH-060), Intermediate Algebra (MATH-070), Algebra Preparation-Computer Assisted (MATH-059), and Math Analysis (MATH-240). The previous research study included MATH-070 and MATH-060 among the top 20 historically difficult courses.

- Math courses with low success rates, but not identified in the top 20 shown in Table 2 include: Arithmetic (MATH-025/026), Geometry (MATH-083), Algebra Preparation (MATH-058), Trigonometry (MATH-102), College Algebra (MATH-103), Calculus I (MATH-211), Calculus II (MATH-212), and Calculus III (MATH-213).

- Career Technology Education (CTE) courses in the top 20 historically difficult courses included Web Site Development I (CIT-170) and History of Graphic Design (GMD-120).

- Other courses identified in the top 20 historically difficult course list shown in Table 1 include Individual Studies and Language Skills (GENST-091), Latin American Civilization (HIST-240), Individualized Learning Assistance (GENST-092), Elementary German (GERMAN-101), Learning to Learn (COUNS-142), Economic History of the United States (HIST-170), Great Books, Great Ideas (HUMAN-150), Introduction to Eastern Religion and Philosophy (PHILOS-102), Guitar Studies I (MUSIC-160), Individual Computer Applications (GENSTU-082), Landmarks of Art and Visual Culture (ART-205), Introduction to Kinesiology (KPET-200), Music Appreciation (MUSIC-105), and Becoming a Successful Distance Learning Student (COUNS-070).

Table 1. Top 20 Courses with Historically Low Success Rates: Fall Terms (2013, 2014, and 2015)

Course	Course Title	Success Rates	Retention Rates	Enrolled	On-Line Offering	On-Ground Offering
GENSTU-091	Individual Studies and Language Skills	46%	91%	54	No	Yes
HIST-240	Latin America Civilization	47%	75%	129	Yes	Yes
CIT-170	Website Development I	49%	66%	96	Yes	Yes
GENSTU-092	Individualized Learning Assistance	49%	87%	90	No	Yes
GERMAN-101	Elementary German	50%	73%	167	No	Yes
COUNS-142	Learning to Learn	51%	83%	120	No	Yes
HIST-170	Economic History of the United States	52%	70%	33	Yes	Yes
HUMAN-150	Great Books, Great Ideas	52%	70%	113	Yes	Yes
MATH-060	Elementary Algebra	52%	82%	2251	No	Yes

Course	Course Title	Success Rates	Retention Rates	Enrolled	On-Line Offering	On-Ground Offering
MATH-070	Intermediate Algebra	54%	80%	2761	No	Yes
GMD-120	History of Graphic Design	55%	77%	340	Yes	Yes
PHILOS-102	Introduction to Eastern Religion and Philosophy	55%	87%	142	No	Yes
MUSIC-160	Guitar Studies I	56%	78%	80	No	Yes
GENSTU-082	Individual Computer Applications	57%	86%	35	No	Yes
MATH-059	Algebra Preparation (Computer Assisted)	57%	83%	298	No	Yes
ART-205	Landmarks of Art and Visual Culture	58%	76%	139	Yes	No
KPET-200	Introduction to Kinesiology	58%	87%	192	No	Yes
MATH-240	Math Analysis	58%	70%	153	No	Yes
MUSIC-105	Music Appreciation	58%	85%	409	Yes	Yes
COUNS-070	Becoming a Successful Distance Learning Student	59%	83%	133	Yes	No

Table 2. All Courses with Historically Low Success Rates*: Fall Terms (2013, 2014, and 2015) *Indicates success rates are less than 70%

Course	Course Title	Success Rates	Retention Rates	Enrolled	On-Line Offering	On-Ground Offering
GMD-142	Digital Illustration	59%	74%	108	No	Yes
PHILOS-101	Introduction to Philosophy	59%	83%	1555	Yes	Yes
PHILOS-220	Introduction to Comparative Religion	59%	87%	270	Yes	Yes
CMPNET-151	CCNA Prep I	60%	79%	135	No	Yes
MATH-026	Arithmetic-Computer Assisted	60%	85%	364	No	Yes
PSYCH-235	Psychology of Gender Roles	60%	81%	151	Yes	Yes
MATH-083	Geometry	61%	83%	563	No	Yes
MATH-211	Calculus I	61%	81%	654	No	Yes
MATH-212	Calculus II	61%	81%	483	No	Yes
PHILOS-120	Introduction to Ethics	61%	82%	160	No	Yes
PHYSIC-220	Physics for Scientists	61%	76%	306	No	Yes
THEATR-110	Understanding Theatre	61%	79%	326	Yes	Yes
BIOSCI-106	Organismal and Environmental Biology	62%	81%	937	Yes	Yes
KPET-201	Principles of Physical Fitness and Conditioning	62%	89%	176	Yes	Yes
MATH-058	Algebra Preparation	62%	89%	1659	No	Yes

Course	Course Title	Success Rates	Retention Rates	Enrolled	On-Line Offering	On-Ground Offering
PHOTO-155	Photography	62%	83%	139	No	Yes
WINEST-100	Wine Appreciation	62%	83%	95	No	Yes
ASTRON-102	Astronomy: The Solar System	63%	81%	129	Yes	Yes
BIOSCI-204	Human Anatomy and Physiology II	63%	81%	441	No	Yes
COMS-256	Intercultural Communication	63%	88%	157	Yes	Yes
HIST-102	History of Western Civilization: The Modern Era	63%	86%	335	Yes	Yes
MATH-102	Trigonometry	63%	83%	953	No	Yes
MATH-213	Calculus III	63%	81%	230	No	Yes
MUSIC-107	History of Rock & Roll	63%	85%	317	Yes	Yes
PHOTO-140	History of Photography	63%	88%	627	Yes	Yes
ECON-170	Economic History of the United States	64%	84%	349	Yes	Yes
FRNCH-101	Elementary French I	64%	80%	294	No	Yes
MATH-103	College Algebra	64%	82%	883	No	Yes
PHOTO-150	Cameras and Composition	64%	87%	594	Yes	Yes
SOCI-103	Intimate Relationships and Families	64%	85%	633	Yes	Yes
BUS-211	Business Law	65%	87%	758	Yes	Yes
COMS-260	Communication and Gender	65%	89%	223	Yes	Yes
ENGL-081	Intermediate Reading and Writing Skills	65%	88%	969	No	Yes
ENGL-094	Introduction to Technical Writing	65%	88%	231	No	Yes
HIST-112	United States History II	65%	85%	2083	Yes	Yes
HIST-161	World History I	65%	87%	470	No	Yes
HLHSCI-151	Emergency Medical Technician I	65%	73%	431	No	Yes
HUMAN-101	Forms and Ideas in Humanities	65%	78%	111	No	Yes
SPAN-101	Elementary Spanish I	65%	80%	1308	Yes	Yes
BUS-140	Principles of Marketing	66%	80%	293	Yes	Yes
CINEMA-122	History of Cinema	66%	91%	306	No	Yes
ENGL-071	Beginning Reading and Writing Skills	66%	91%	477	No	Yes
HUMAN-100	Introduction to Studies in Humanities	66%	76%	235	Yes	Yes
MEA-110	Writing for Journalism and New Media	66%	90%	143	No	Yes
PARLGL-101	Introduction to Law	66%	83%	218	No	Yes
PSYCH-109	Social Psychology	66%	85%	253	Yes	Yes
ASTRON-101	The Steller System	67%	90%	309	Yes	Yes

Course	Course Title	Success Rates	Retention Rates	Enrolled	On-Line Offering	On-Ground Offering
BUS-201	Principles of Accounting	67%	83%	774	No	Yes
CMPSCI-111	Introduction to Algorithms and Programming/Java	67%	82%	357	No	Yes
COUNS-100	Success Strategies for the Adult Reentry Student	67%	78%	110	Yes	Yes
ENGL-096	Accelerated Preparation for College Reading and Writing	67%	86%	1686	No	Yes
GMD-101	Introduction to Visual Communication	67%	81%	200	No	Yes
HIST-101	History of Western Civilization: Pre-Industrial West	67%	91%	658	No	Yes
HIST-111	United States History I	67%	84%	3416	Yes	Yes
ITAL-101	Elementary Italian I	67%	82%	152	No	Yes
MEA-100	Mass Media and Society	67%	91%	650	Yes	Yes
PHILOS-106	Critical Reasoning	67%	89%	871	Yes	Yes
WATER-030	Waterworks Mathematics	67%	82%	91	Yes	Yes
COUNS-110	Career Life- Planning	68%	87%	479	Yes	Yes
ESL-080	College Writing and Grammar- Level III	68%	92%	145	No	Yes
FIRETC-102	Fire Prevention Technology	68%	89%	179	Yes	Yes
GMD-144	Graphic Design I	68%	83%	114	No	Yes
MATH-025	Arithmetic	68%	90%	668	No	Yes
PSYCH-101	Introduction to Psychology	68%	89%	3932	Yes	Yes
PSYCH-105	Personal Growth	68%	91%	135	No	Yes
PSYCH-240	Abnormal Psychology	68%	87%	398	Yes	Yes
SOCI-150	Introduction to Criminology	68%	87%	279	Yes	Yes
SOCI-210	Sociology of Deviance	68%	87%	219	Yes	Yes
WELD-092	Introduction to Metal Fabrication	68%	86%	71	No	Yes
ARCHT-110	Architectural Drafting I	69%	84%	85	No	Yes
ART-111	Art History: Renaissance to Modern	69%	87%	340	Yes	Yes
GEOL-109	Earth Science	69%	88%	492	Yes	Yes
SOCI-200	Introduction to Women's Studies	69%	90%	754	Yes	Yes
SPAN-102	Elementary Spanish II	69%	81%	207	No	Yes

Recommendations

Upon review of the results, the following recommendations should be taken into consideration:

- Collaborate with faculty to identify which of the courses from tables 1 and 2 are suitable for online tutoring.

- Work with faculty to better understand the specific aspects of the courses in the top 20 list that are problematic for students, including reviewing results from course student learning outcomes (SLOs).

- Explore ways to market online tutoring opportunities to instructors who teach courses identified in the top 20 list of courses with historically low success rates and students who enroll in them.

- Disseminate the results to department chairs and division deans so the results can be integrated with department SLO and program planning.

Methodology

1) To conduct the analysis, data were obtained through the College's 320 and Chancellor's Office USX referential files from Fall 2013, 2014 and 2015. Within these files, courses included in the analysis were identified by section type. To perform the analyses data obtained were analyzed using the Statistical Package for the Social Science (SPSS, 2015) and Excel (2013).

2) Exclusions
   a. In-service training and Cooperative Work Experience courses.
   b. Courses with less than 4 sections offered when all fall terms included were combined.
   c. Courses with less than 10 students enrolled.
   d. Courses with only one semester of data.

3) Definitions for retention and success rates

   a. **Course Retention** is defined as the percent of students retained in courses out of total enrolled in courses: Numerator = Number of students (duplicated) with A, B, C, D, F, I, CR/P, FW, NC/NP; Denominator = Number of students (duplicated) with A, B, C, D, DR, F, I, W, CR/P, FW, NC/NP. (This report uses the RP Group definition, which facilitates statewide comparisons.)

   b. **Course Success** is defined as the percent of students successful in courses out of total enrolled in courses: Numerator = Number of students (duplicated) with A, B, C, CR/P; Denominator = Number of students (duplicated) with A, B, C, D, DR, F, FW, CR/P, NC/NP, W, I. (This analysis uses the RP Group definition, which facilitates statewide comparisons.)

References

Meuschke, D.M., Gribbons, B.C., & Parker, C.A. (2015, January). Research Brief #77. Top twenty courses with low success rates: Fall 2011, 2012, and 2013.

Parker, C.A., Meuschke, D.M. & Gribbons, B.C. (2013, January). Research Brief #47. Top twenty courses with historically low success rates: Fall 2009, 2010 and 2011.

Parker, C.A., Meuschke, D.M. & Gribbons, B.C. (2009, July). Ad Hoc Report. Supplemental instruction needs assessment: spring 2009. College of the Canyons: Santa Clarita, CA.

For more detailed information on this research brief, stop by the Institutional Development and Technology office located in BONH-224, or call Daylene Meuschke, Dean of Institutional Research, Planning and Institutional Effectiveness at 661.362.5329.

Recommendation: Collaborate with faculty to identify which of the courses from tables 1 and 2 are suitable for online tutoring.

> ### Action Items
> - The following courses were identified in table 1 and 2 that need to be reviewed in DSPS and Counseling offices: General Studies 082, 091, 092, Counseling 070, 100, 110, and 142.
> - The department has moved all General Studies courses to noncredit. The courses are no longer graded and are available to students for only the hours needed by the student. This now fits to the student's needs.
> - The Counseling department has completed Counseling 070 to noncredit. It is currently awaiting approval at the curriculum committee.
> - The Counseling 100, 110, and 142 courses will be reviewed by the counseling department to determine the reasons why the courses have a historically low success rates. The review will include the determination of online counseling to assist students in these courses.

Recommendation: Work with faculty to better understand the specific aspects of the courses in the top 20 list that are problematic for students, including reviewing results from course student learning outcomes (SLOs).

> ### Action Item
> - The Counseling 100, 110, and 142 courses will be reviewed by the counseling department to determine the reasons why the courses have a historically low success rates. The review will include the SLOs, sample classroom activities, and a review of number of students who withdraw from the courses.

Recommendation: Explore ways to market online tutoring opportunities to instructors who teach courses identified in the top 20 list of courses with historically low success rates and students who enroll in them.

> ### Action Item
> - The Counseling 100, 110, and 142 courses will be reviewed by the counseling department to determine the reasons why the courses have a historically low success rates. We will be discussing using online support services to assist our students.

Recommendation: Disseminate the results to department chairs and division deans so the results can be integrated with department SLO and program planning.

> ### Action Item
> - The department chair, dean, and curriculum coordinator for the Counseling 100, 110, and 142 courses will discuss and identify ways to improve and incorporate changes to the SLO and program review process.

Recommendation: Collaborate with faculty to identify which of the courses from tables 1 and 2 are suitable for online tutoring.

> ### Action Item
> - The courses from tables 1 and 2 will be shared with the division deans to work with the department chairs to identify tutoring needs for these courses. This information

will then be discussed with the TLC to ensure appropriate and suitable tutoring is available to students.

Recommendation: Work with faculty to better understand the specific aspects of the courses in the top 20 list that are problematic for students, including reviewing results from course student learning outcomes (SLOs).

Action Item

- The list of courses will be shared with division deans, department chairs, curriculum coordinators, and the SLO committee to review.

Recommendation: Explore ways to market online tutoring opportunities to instructors who teach courses identified in the top 20 list of courses with historically low success rates and students who enroll in them.

Action Item

- The Title V implementation committee will share the results with the TLC administrators to institute a marketing plan once the tutoring offerings are in place.

Recommendation: Disseminate the results to department chairs and division deans so the results can be integrated with department SLO and program planning.

Action Item

- The department chair, dean, and curriculum coordinator for the courses will discuss and identify ways to improve and incorporate changes to the SLO and program review process.