

FRONTIER HIGH SCHOOL

COURSE DESCRIPTION HANDBOOK 2026-2027



FRONTIER JR.-SR. HIGH SCHOOL MISSION STATEMENT

The primary mission of Frontier Jr-Sr High School is to challenge and enable students to think logically, act responsibly, recognize their own self-worth and become contributing, committed members of the global community.

INTRODUCTION

One of the most important decisions that a person makes during his/her lifetime is the decision that he/she makes in selecting and formulating educational and vocational goals. This decision affects family, friends, hobbies, general satisfaction, mental well-being, and total life style; therefore, educational planning becomes a vital part of a student's high school experience.

It is the purpose of this guide to assist students in selecting the required courses for graduating from high school and for preparing themselves wisely for advancement toward their educational and vocational goals. Students receive considerable attention from the school counselor with whom they have numerous meetings, both in individual conferences and in group sessions to help them with their goal identifications and course selections. Teachers and people earning their living in other fields of interest provide additional information and advice about the world of work and the choices that students may consider.

COURSE SELECTION

Students make preliminary choices about their courses for the following year in individual or small group sessions with the guidance counselor. It is extremely important that students choose wisely, for the master schedule is generated from these course selections. Each student will complete a pre-registration form and create and/or revisit their individual four year plan. Four year plan guides are provided to assist students and parents in keeping track of requirements, credits, and career plans.

The final responsibility for course selection, however, rests entirely on the student (with his/her parent's consent). The student selects elective courses and should keep count of credits toward graduation. After the courses have been selected, the official registration form must be approved by the student's parents.

SCHEDULE CHANGES

Students may make changes to their schedule after they have submitted their pre-registration form. Students are encouraged to make sure they choose classes that best fit their academic needs. Once a master schedule is built, it may become more difficult to make changes, so it is important for students to try to make changes as soon as possible.

Once the school year begins, students may make changes during the first few days of school. After that, changes due to academic reasons will be made through the guidance department. Students may drop a course only with the permission of the principal, but will receive an F for that course on his/her permanent transcript.

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New Indiana Diploma

The new diploma structure includes a base (minimum requirements) for every student, plus the opportunity to earn readiness seals aligned with their unique path. Students are encouraged to seize this flexibility by personalizing their high school experience. The new seals provide additional intentionality to maximize readiness and are designed to be permeable, allowing students to update their graduation plan and pivot, if their original interests and goals change. Students who do not earn a seal must still complete components 2 and 3 of Graduation Pathways.

Note: The federally-required alternate diploma for students in special education with a significant cognitive disability is still available.

	REQUIRED CREDITS	FLEXIBLE CREDITS
ENGLISH	8 CREDITS 2 credits: English 9 1 credit: Communications-focused course	5 additional English credits - Ex: English 10-12, American Literature, World Literature, Expository Writing, etc.
MATH	7 CREDITS 2 credits: Algebra I 1 credit: Personal Finance	4 additional math credits - Ex. Geometry, Algebra II, Pre-Calculus, Probability and Statistics, Business Math, etc.
SCIENCE, TECHNOLOGY, AND ENGINEERING	7 CREDITS 2 credits: Biology I 1 credit: Computer Science	2 additional science credits - Ex. Biology II, Chemistry I, Physics I, etc. 2 STEM-focused credits - Ex. Plant and Soil Science, Principles of Engineering, Software Development, etc.
SOCIAL STUDIES	5 CREDITS 2 credits: U.S. History 1 credit: U.S. Government	2 credits: World Perspectives - Ex. Geography and History of the World, AP World History, French III, etc.
PE/HEALTH	2 CREDITS 1 credit: Physical Education 1 credit: Health & Wellness	
PERSONALIZED ELECTIVES	12 CREDITS Students are encouraged to utilize the new readiness-seals to align these personalized electives with their unique goals. Personalized electives can include a variety of courses, such as Career and Technical Education (CTE), Performing or Fine Arts, and World Languages.	
COLLEGE & CAREERS	1 CREDIT 1 credit: Preparing for College & Careers	Preparing for College and Careers can be offered in middle school to provide additional flexibility in a student's high school schedule.

Components 2 & 3 of Graduation Pathways

Employability Skills

- ☐ Work Based Learning
 - ☐ Employment
 - ☐ Internship

Or

- ☐ Service Based Learning - 15-20 total hours
 - ☐ Extracurricular (sport or club)
or
 - ☐ Co-curricular –active participation (pep band, FFA, FCCLA, BPA, HOSA)
 - ☐ Civic Engagements

*A student may only use one sport, club, or co-curricular to count for 8 hours. The remaining hours will be earned by other service-based learning opportunities.

Post-Secondary Readiness

- ☐ SAT – earn a score of at least 480 on Reading/Writing and 530 on Math

Or

- ☐ Dual Credits – “C” average or higher in at least three courses; One of the three must be in a core content area, or all three must be part of a CTE pathway

Or

- ☐ Next Level Pathway Course Completion – “C” average or higher in three-course Pathway

Readiness Seals

Readiness seals are designed to be permeable, allowing students to update their graduation plan and pivot, if their original interests and goals change. Although seals are optional, students are encouraged to utilize the blueprints below to focus their flexible credits into a connected pathway that aligns with their future goals. Students may earn one or multiple seals. Graduation Pathways requirements will be satisfied through completion of any seal.



ENROLLMENT



EMPLOYMENT



ENLISTMENT & SERVICE



- Complete at least 4 World Language and 6 Social Studies credits
- Complete at least 8 Math credits
 - Algebra I plus Geometry, Algebra II, and Pre-Calculus or any advanced math credits aligned to their course of study
- Complete at least 6 Science credits
 - Biology I plus Chemistry and Physics or any advanced lab science credits aligned to their course of study
- Earn a C or higher in all courses and earn a cumulative B average
- Complete one of the following:
 - Earn 4 credits in AP, IB, or Cambridge courses and take corresponding exams
 - Earn 6 college credits
 - Score a 1250 on the SAT or a 26 on the ACT
 - Earn two of the following:
 - At least 3 college credits
 - 2 credits in AP courses and take corresponding exams
 - 2 credits in IB courses and take corresponding exams
 - 2 credits in Cambridge courses and take corresponding exams

- Complete one of the following:
 - A market-driven credential of value aligned to a specific occupation
 - 3 courses in a Career and Technology Education (CTE) pathway
 - An approved career preparation experience aligned to Indiana's CSA program, or
 - An approved, locally-created pathway
- Complete 150 hours of work-based learning (may include multiple experiences that are paid, unpaid, on-site, or simulated)
- Demonstrate skill development in Communication, Collaboration, and Work Ethic
- Meet attendance goal:
 - At least 1 school year with no more than 3 days of unexcused absences; or
 - At least 150 hours of work-based learning experience with no more than 3 unexcused absences.

- Complete one of the following:
 - Introduction to Public Service course or approved locally-created equivalent
 - Emphasis on developing an awareness of the physical standards and character required for service
 - One year of JROTC or Civil Air Patrol in high school
- Achieve a score of 31 on the ASVAB and complete one of the following:
 - All three components of the Career Exploration Program
 - A career exploration tool approved by IDOE
- Meet attendance goal:
 - At least 1 school year with no more than 3 days of unexcused absences
- Demonstrate skill development in Communication, Collaboration, and Work Ethic
 - Externally verified through a mentorship experience with current military personnel, veterans, or other public safety professionals



Earn the Honors Enrollment Seal, **plus**:

- Earn a credential of value that may include, for example:
 - Associate degree;
 - Technical Certificate;
 - Indiana College Core;
 - AP Scholar with Distinction;
 - Cambridge AICE Diploma; or
 - IB Diploma
- Complete at least 75 hours of work-based learning (may include multiple experiences that are paid, unpaid, on-site, or simulated)
- Demonstrate skill development in the following areas: Communication, Collaboration, and Work Ethic

Earn the Honors Employment Seal, **plus**:

- Earn a market-driven credential of value that may include, for example:
 - Associate degree;
 - Technical Certificate;
 - Indiana College Core; or
 - Advanced industry certificate
- Complete additional work-based learning (total of 650 hours in one or more experiences) that may include, for example:
 - Pre-Apprenticeship
 - Modern Youth Apprenticeship
- Demonstrate skill development in Communication, Collaboration, Work Ethic, and any additional skills determined locally

Earn the Honors Enlistment Seal, **plus**:

- Complete one of the following:
 - Achieve a score of 50 or higher on the ASVAB
 - Enrollment in ROTC at the collegiate level
 - Acceptance to a service academy
- Demonstrate excellence in leadership through one of the following:
 - Completion of at least 100 hours of public service;
 - Holding a leadership role in a co/extracurricular activity;
 - Completion of two seasons of a team-based physical sport or activity

ACADEMIC REQUIREMENTS

Credit Requirements

Due to the number of credits students could earn during their four years in high school, a corporation decision was made to increase the number of credits required to earn the following diplomas:

- The Indiana Diploma must earn 42 credits
- The Indiana Diploma plus Honors Seal or Honors Plus Seal must earn 54 credits.

FOUR-YEAR PLANS

The four-year plan is a student's foundation for connecting his/her post-high school goals with the courses that he/she will need to take to meet these goals. Information is provided in this handbook to help the student make the most effective decisions for the four-year plan, as well as, next year course requests. The following two pages show what we use at Frontier to help lay out their plan.

8TH GRADE	GRADE	CREDIT	8TH GRADE	GRADE	CREDIT
PCC					

FRESHMAN	GRADE	CREDIT	FRESHMAN	GRADE	CREDIT
English 9			English 9		
Math			Math		
Science			Science		

SOPHOMORE	GRADE	CREDIT	SOPHOMORE	GRADE	CREDIT
English 10			English 10		
Math			Math		
Science			Science		
World History			World History		

JUNIOR	GRADE	CREDIT	JUNIOR	GRADE	CREDIT
English			English		
Math			Math		
Science			Science		
US History			US History		

SENIOR	GRADE	CREDIT	SENIOR	GRADE	CREDIT
English			English		
Government			Personal Finance		

CREDITS EARNED:

Grade 8: _____ Grade 9: _____

Grade 10: _____ Grade 11: _____

Grade 12: _____

TOTAL CREDITS EARNED:

Employability Skills

****Service Based Learning**

Date: _____

****Work Based Learning**

Hours: _____

IN Diploma Credit Check Sheet		
Indiana Diploma Requirements 42 credits	S1	S2
English (8 Cr)		
English 9		
English		
English		
Comm course/ English		
Math (7 Cr)		
Algebra I		
Math		
Math		
Personal Finance (1 Cr)		
Science (7 Cr)		
Biology I		
Computing Foundations (1 Cr)		
Science		
STEM Science		
Social Studies (6 cr)		
US History		
Social Studies		
US Government (1 Cr)		
Physical Education (1 Cr)		
Health (1 Cr)		
PCC (1 Cr)		
12 Credits — Personalized		

Postsecondary Readiness

****SAT** Date: _____

ERW _____ Math _____

****Dual Credits**

****Pathway**

1.

2.

3.

Honors Seal - Enrollment			Honors Seal - Employment			Honors Seal - Enlistment		
CREDIT CHECK SHEET			CREDIT CHECK SHEET			CREDIT CHECK SHEET		
Indiana Diploma	S1	S2	Indiana Diploma	S1	S2	Indiana Diploma	S1	S2
Requirements 42 credits			Requirements 42 credits			Requirements 42 credits		
English (8 Cr)			English (8 Cr)			English (8 Cr)		
9			9			9		
English			English			English		
English			English			English		
Comm crs/Eng			Comm crs/Eng			Comm crs/Eng		
Math (8 Cr)			Math (7 Cr)			Math (7 Cr)		
Algebra I			Algebra I			Algebra I		
Geometry			Math			Math		
Algebra II			Math			Math		
Adv. Math Elective			Personal Finance (1 Sem)			Personal Finance (1 Sem)		
Personal Finance (1 Sem)								
Science (7 Cr)			Science (7 Cr)			Science (7 Cr)		
Biology I			Biology I			Biology I		
Chemistry			Science			Science		
Physics or Lab Science			STEM focused Science			STEM focused Science		
Comp Found (1 Sem)			Comp Found (1 Sem)			Comp Found (1 Sem)		
Social Studies (6 cr)			Social Studies (5 cr)			Social Studies (5 cr)		
U.S. History			U.S. History			U.S. History		
U.S. Government/Econ			U.S. Government			U.S. Government		
Social Studies			Social Studies			Social Studies		
Physical Education (1 Cr)			Physical Education (1 Cr)			Physical Education (1 Cr)		
Health (1 Cr)			Health (1 Cr)			Health (1 Cr)		
College/Careers (PCC) (1 Cr)			College/Careers (PCC) (1 CR)			College/Careers (PCC) (1 CR)		
Honors Seal - Enrollment			Honors Seal - Employment			Honors Seal - Enlistment		
Spanish I			CTE Pathway-3 Courses			Intro to Public Service Crse		
Spanish II			Principles			ASVAB - 31		
			Concentrator A			Component 1		
Complete one of the following			Concentrator B			Component 2		
6 College Credits						Component 3		
College Credit			150 Hours of WBL					
College Credit						Attendance Goal		
College Credit			Skill Development					
						Skill Development		
Score of 1250 on SAT			Attendance Goal					
Honor Plus Seal - Enrollment			Honor Plus Seal - Employment			Honor Plus Seal - Enlistment		
Choose 1 of the following			Choose 1 of the following			ASVAB - 50		
Associates Degree			Associates Degree					
Technical Certificate			Technical Certificate			Complete 1 of the following		
ICC			ICC			100 hours of public service		
						Leadership role in activity		
75 Hours of WBL			650 Hours of WBL			2 Seasons of a Sport		
Skill Development			Skill Development					

GRADING POLICIES

Nine-Week's Grades

Grades are issued at the end of each nine-week period.

Semester Grades

Semester grades are the averages of 1st and 2nd 9-week grades and the 3rd and 4th 9-week grades for each course. Only semester grades are posted to permanent records and used to determine the cumulative grade point average (GPA) and class rank.

Grading Scales

Grades are determined using the following scale:

A+ = 100%	B+ = 87% - 89%	C+ = 77% - 79%	D+ = 67% - 69%	F = 59%
A = 93% - 99%	B = 83% - 86%	C = 73% - 76%	D = 63% - 66%	and below
A- = 90% - 92%	B- = 80% - 82%	C- = 70% - 72%	D- = 60% - 62%	

For the purpose of calculating the GPA, semester letter grades are converted to points on a 4.0 scale. The point values assigned to each letter grade are as follows:

A+ = 4.00	B+ = 3.33	C+ = 2.33	D+ = 1.33	F = 0.00
A = 4.00	B = 3.00	C = 2.00	D = 1.00	
A- = 3.67	B- = 2.67	C- = 1.67	D- = .67	

The GPA is calculated by dividing a student's total number of points by the number of credits that student has attempted.

Weighted Courses and Grading Scale

The following courses are "weighted" because of rigor and dual credit:

Biology II	Anatomy/Physiology
ACP English	ACP Speech
Pre-Calculus	Quantitative Reasoning
ACP Calculus	ACP US History
Physics	

Only grades of B- or better will be awarded the additional weight.

Grade	Regular Points	Points with Weight
A+/A	4.0	5.0
A-	3.67	4.67
B+	3.33	4.33
B	3.00	4.00
B-	2.67	3.67
C+	2.33	2.33
C	2.00	2.00
C-	1.67	1.67
D+	1.33	1.33
D	1.00	1.00
D-	.67	.67
F	.00	.00

Valedictorian/Salutatorian Qualifications:

The Valedictorian and Salutatorian will be based on the highest-grade point average. If the top two students in a class have a GPA that is 4.0 or higher, then two co-vedictorians will be awarded, and the student with the third highest GPA will be named salutatorian. The following criteria are required to be eligible for the valedictorian or salutatorian award:

- 1) A student must have attended Frontier Jr./Sr. High School for their entire senior year and a total of six of their eight high school semesters.
- 2) A student must carry a full semester load every semester for four years and will be enrolled full-time in credited classes for the entire school day.
- 3) A student will earn an Honors Seal.
- 4) A student will earn 30 core dual credits during their 4 years of high school.

Class Rank Determination:

Class rank is determined by Grade Point Average.

SPECIAL EDUCATION PROGRAM

The Special Education Program provides services to Frontier students with disabilities. The services provided to these students in the Resource Room include study and test taking assistance, direct instruction in academic subject areas, life social skills, accommodations, support for behavior and academic goals, and consultation for general education teachers in mainstream classes. Eligibility for special education services is normally based on the evaluations of teachers and a licensed school psychologist. Placement into the special education program is then determined by a case conference committee made up of parents, teachers, administrators, counselors, the psychologist, and a representative from Cooperative School Services. The committee decides on the least restrictive environment for the student's placement and an Individual Transition Plan (ITP) and Individualized Education Program (IEP) are written based on this. The IEP is a legal document and contains specific goals and objectives for the student's education. After initial placement into the special education program, and the student's progress is monitored for progress and continued eligibility is determined annually. The conference committee meets yearly to review each student's progress and revise the IEP for the next school year.

ENGLISH

ENGLISH 9 *1002

Description: English 9, an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and oral communication, focusing on literature within an appropriate complexity for this grade level. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository (informative), narrative, and argumentative compositions, and sustained research assignments. Students deliver grade-appropriate oral presentations with attention to audience and purpose and access, analyze, and evaluate online information.

ENGLISH 10 *1004

Description: English 10, an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and oral communication, focusing on literature with an appropriate complexity for this grade level. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository (informative) and argumentative compositions, and sustained research assignments. Students deliver grade-appropriate oral presentations with attention to audience and purpose and access, analyze, and evaluate online information.

ENGLISH 11 *1006

Description: English 11, an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 11-12, is a study of language, literature, composition, and oral communication focusing on literature with an appropriate complexity for this grade level. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays (e.g. analytical, argumentative, informative), and more sustained research assignments incorporating visual information in the form of pictures, graphs, charts and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

ENGLISH 11 (LITERATURE FOR LIFE) *1006

*Class may not be used for an Honors Seal Diploma

Description: English 11 Literature for Life is slower paced for students needing extra time comprehending information. Through the study of theme related elements, American literature will be studied tying in life and job related skills to the theme. The use of worksheets, projects, spelling, and vocabulary will reinforce the topic. Writing elements will focus on 1st person material stressing proper sentence structure, grammar, and spelling. Speech elements will include discussion, recitation, and presentation. Participation in this class will

be limited to students who are continuing to work toward successful completion of the English section of the End of Course Assessment (ECA), or those who qualify for educational adaptations as documented in an IEP. Students who wish to pursue a four-year post-secondary degree are strongly encouraged to enroll in English 11.

ENGLISH 12 (LITERATURE FOR LIFE) *1008

*Class may not be used for an Honors Seal Diploma

Description: English 12 Literature for Life is a two-semester course that is designed to improve a student's written communication skills and to continue a student's exploration of literature. Writing assignments will focus on business, personal and technical writing. A formal research paper will be written in the second semester. Students must receive teacher and guidance counselor approval before enrolling in this course. Enrollment in this course is limited to those students who have attempted and not yet passed the English section of the End of Course Assessment (ECA), or those who qualify for educational adaptations as documented in an IEP. Students who wish to pursue a four-year post secondary degree need to enroll in English 12 or AP English.

ENGLISH 12 * 1008

Description: English 12, an integrated English course based on the Indiana Academic Standards for English/Language Arts for Grades 11-12, is a study of language, literature, composition, and oral communication focusing on an exploration of perspective across a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays (e.g. analytical, argumentative, informative), and more sustained research assignments incorporating visual information in the form of pictures, graphs, charts, and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

ACP ENGLISH 12

(W131-IUK & ENGL 202-Ivy Tech)

IU-K dual credit: W131 – 3 college credits – Ivy Tech dual credit ENGL 202 – 3 college credits

Must have a GPA of 2.7 or higher to receive dual credit

ACP English 12 is a weighted class for students who receive a B- or better.

Descriptions:

W131: Reading, Writing, & Inquiry I is a one-semester 3 credit hour Indiana University course that offers instruction and practice in the critical reading and writing skills required for college-level work, with an emphasis on written assignments that call for summary, critique, analysis, and arguments based on sources. This is an Indiana University course. The purpose of this course is to prepare students for the rigor of writing throughout college. The focus is on scholarly investigation of sources, critical thinking and reading, learning how to recognize and utilize specific writing strategies, skills and fluency. Each unit will include preliminary work and assignments leading to a major essay to conclude. Points will be accumulated from homework, in-class assignments, participation, and final written assignments. Since much work and discussion will be carried on in class, impeccable attendance and assignment submission is imperative.

ENGL202: Illustrate an understanding and practice of creativity in the medium of language through the development of texts. Develop an aesthetic appreciation for creative writing in one or more literary genres – fiction, poetry, drama, and nonfiction through reading and discussing literary works. Demonstrate greater expressive proficiency through a better understanding of such literary conventions as plot, setting, characterization, point of view, meter, imagery, symbolism, figurative language, dialogue, and other such matters of style. Demonstrate a high degree of competency in adhering to conventions of Standard English. Develop revision skills as a part of the writing process. Distinguish among the creative opportunities and constraints of different literary genres. This course introduces students to opportunities for self-expression in one or more literary genres - fiction, poetry, drama, and the creative essay.

SPEECH *1076

Description: Speech, a course based on Indiana's Academic Standards for English/Language Arts and the Common Core State Standards for English/Language Arts Standards, is the study and application of the basic principles and techniques of effective oral communication. Students deliver focused and coherent speeches that convey clear messages, using gestures, tone, and vocabulary appropriate to the audience and purpose. Students deliver different types of oral and multimedia presentations, including viewpoint, instructional, demonstration, informative, persuasive, and impromptu. Students use the same Standard English conventions for oral speech that they use in their writing.

ACP SPEECH *1078 (S121—IU-K)

Indiana dual credit: S121 – 3 college credits

Must have a GPA of 2.7 or higher to receive dual credit

ACP Speech is a weighted class for students who receive a B- or better.

Description: ACP Speech is a dual credit course through Indiana University -- SPCH S121 Public Speaking. The course introduces you to the close interrelation of the theory and practice of rhetoric. It does not resemble the simple skills-only versions of "basic public speaking" that you may be familiar with. Although you will be rigorously trained in all the formal skills and techniques, oral communication is not merely technique; it is a human art of the highest distinction. This class is not training in strategic manipulation, but in how to use the spoken word for good. We will look closely at why speech is capable of manipulating, deceiving, and seducing, and how to spot, avoid, and combat these uses. This class is a core class in most colleges and universities; it is also a part of Indiana's core transfer library under the name "Fundamentals of Public Speaking" and should transfer to any public university in Indiana.

BASIC SKILLS DEVELOPMENT *0500

Description: Basic Skills Development is a multidisciplinary course that provides students continuing opportunities to develop basic skills including: (1) reading, (2) writing, (3) listening, (4) speaking, (5) mathematical computation, (6) note taking, (7) study and organizational skills, and (8) problem-solving skills, which are essential for high school course work achievement. Determination of the skills to be emphasized in this course is based on Indiana's standards, individual school corporation general curriculum plans, and the student's Individualized Education Programs (IEP) or other individualized plans. Skills selected for developmental work provide students with the ability to continue to learn in a range of different life situations.

FINE ARTS

ADVANCED CHORUS *4188

Description: Advanced Chorus is based on the Indiana Academic Standards for High School Choral Music. Students taking Advanced Chorus develop musicianship and specific performance skills through ensemble and solo singing. This class includes the study of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Chorus classes provide opportunities for performing, creating, and responding to music. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

CONCERT BAND *4170

Description: Advanced Concert Band is based on the Indiana Academic Standards for High School Instrumental Music. This course provides students with a balanced comprehensive study of music through the concert band, which develops skills in the psychomotor, cognitive, and affective domains. Ensemble and solo activities are designed to develop elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature, and integration of other applicable disciplines. Experiences include improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

ADVANCED THEATRE ARTS *4240

Description: Advanced Theatre Arts is based on the Indiana Academic Standards for Theatre. Students enrolled in Advanced Theatre Arts read and analyze plays and apply criteria to make informed judgments. They draw on events and experiences to create scripted monologues and scenes, create scenic designs for existing plays, and build characters through observation, improvisation, and script analysis. These activities should incorporate elements of theatre history, culture, analysis, response, creative process, and integrated studies. Additionally, students explore careers in theatre arts and begin to develop a portfolio of their work. They also attend and critique theatre productions and identify ways to support the theatre in their community.

INTRODUCTION TO 2D ART *4000 (Offered 1st semester only)

Description: Introduction to Two-Dimensional Art is a course based on the Indiana Academic Standards for Visual Art. Students taking this course engage in sequential learning experiences that encompass art history, art criticism, aesthetics, production, and integrated studies and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create two-dimensional works of art, reflect upon

the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources.

INTRODUCTION TO 3D ART *4002 (Offered 2nd semester only)

Description: Introduction to Three-Dimensional Art is a course based on the Indiana Academic Standards for Visual Art. Students taking this course engage in sequential learning experiences that encompass art history, art criticism, aesthetics, production, and integrated studies and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create three-dimensional works of art, reflect upon the outcomes, and revise their work; relate art other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources.

DRAWING I *4060

Prerequisites: Introduction to 2D Art

Description: Drawing is a course based on the Indiana Academic Standards for Visual Art. Students in drawing engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students create drawings utilizing processes such as sketching, rendering, contour, gesture, and perspective drawing and use a variety of media such as pencil, chalk, pastels, charcoal, and pen and ink. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

DRAWING II/III *4060

Prerequisites: Drawing I

Description: Building upon skills learned in Drawing I, students will further study compositional elements while working both realistically and abstractly. Increased figurative work will provide opportunities for content considerations and greater technical skills. Historic, modern, and non-traditional approaches to drawing will be explored. Students' media choices will expand to mixed media, pastels, and colored pencils in addition to those used in Drawing I. Assignments will be aimed at producing portfolio-worthy work. Outside of class sketchbooks assignments are part of this course.

PAINTING I *4064

Prerequisites: Introduction to 2D Art

Description: Painting is a course based on the Indiana Academic Standards for Visual Art. Students taking painting engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of portfolio quality works. Students create abstract and realistic paintings, using a variety of materials such as mixed media, watercolor, oil, and acrylics as well as techniques such as

stippling, gouache, wash, and impasto. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

PAINTING II/III *4064

Prerequisites: Painting I

Description: Students will continue to develop perceptual and technical skills using acrylic, watercolor, and/or oil paints. Further exploration of painting styles and art movements will be included. Subject matter will be through observation and material derived from sketchbook research beyond the classroom. Students will have a strong choice in the subject matter and media they choose to paint. Students will work more independently on different projects of their choice to build a strong composition to be stressed toward portfolio-worthy artwork. Students will be responsible for developing an online portfolio to showcase their work and will be accompanied with written artist statements. Sketchbook and research assignments are a part of this course.

CERAMICS I *4040

Prerequisites: Introduction to 3D Art

Description: Ceramics is a course based on the Indiana Academic Standards for Visual Art. Students in ceramics engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students create works of art in clay utilizing the processes of hand building, molds, wheel throwing, slip and glaze techniques, and the firing processes. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

CERAMICS II/III *4040

Prerequisites: Ceramics I

Description: Students will approach more complex challenges both in clay techniques and in communicating ideas through the clay medium. Hand building methods are continued and wheel throwing is introduced. Emphasis is on the use of design principles, historic ceramic traditions from around the world, and creative problem solving skills. Reading, writing, and research are involved. Sketchbook and research assignments are a part of this course.

FIBER ARTS I *4046

Prerequisites: Intro to 3D Art

Description: Fiber Arts is a course based on the Indiana Academic Standards for Visual Art. Students in fiber arts engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students create fiber art works utilizing processes such as loom and off-loom construction, dyeing, coiling, and stitchery. They reflect upon and refine

their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

FIBER ART II/III *4046

Prerequisites: Fiber Arts I

Description: Students in Fiber Arts II and III continue to expand their knowledge/skills they have built in Fiber Arts I and demonstrate a desire to explore a variety of ideas and problems. Their portfolio quality art works will be more refined and advanced in content and technique, as well as meaning. They continue to reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills.

AP ART HISTORY *4025 (not offered at this time)

Description: Art History is a course based on the Indiana Academic Standards for Visual Art. Students taking Art History engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production. Students study works of art and artifacts from world cultures, engage in historically relevant studio activities; utilize research skills to discover social political, economic, technological, environmental, and historical trends and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art related careers.

FOREIGN LANGUAGE

SPANISH I *2120

Description: Spanish I, a course based on Indiana's Academic Standards for World Languages, introduces students to effective strategies for beginning Spanish language learning, and to various aspects of Spanish-speaking culture. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to basic requests and questions, understand and use appropriate greetings and forms of address, participate in brief guided conversations on familiar topics, and write short passages with guidance. This course also emphasizes the development of reading and listening comprehension skills, such as reading isolated words and phrases in a situational context and comprehending brief written or oral directions. Additionally, students will examine the practices, products and perspectives of Spanish-speaking culture; recognize basic routine practices of the target culture; and recognize and use situation-appropriate non-verbal communication. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom.

SPANISH II *2122

Description: Spanish II, a course based on Indiana's Academic Standards for World Languages, builds upon effective strategies for Spanish language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to requests and questions in expanded contexts, participate independently in brief conversations on familiar topics, and write cohesive passages with greater independence and using appropriate formats. This course also emphasizes the development of reading and listening comprehension skills, such as using contextual clues to guess meaning and comprehending longer written or oral directions. Students will address the presentational mode by presenting prepared material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will describe the practices, products and perspectives of Spanish-speaking culture; report on basic family and social practices of the target culture; and describe contributions from the target culture. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom.

ACP SPANISH II *2122

HISP S150: Elementary Spanish

Prerequisites: Spanish I

IU-K S150 – 4 credits

ACP Spanish II is weighted class for students who earn a B- or better.

Description: Spanish II, a course based on Indiana's Academic Standards for World Languages, builds upon effective strategies for Spanish language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to requests and questions in expanded contexts, participate independently in brief conversations on familiar topics, and write cohesive passages with greater independence and using appropriate formats. This course also emphasizes the development of reading and listening comprehension skills, such as using contextual clues to guess meaning and comprehending longer written or oral directions. Students will address the presentational mode by presenting

prepared material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will describe the practices, products and perspectives of Spanish-speaking culture; report on basic family and social practices of the target culture; and describe contributions from the target culture. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom. Description: The second course in the first year (S100-S150 sequence), follows a communicative approach which springs from the idea that languages are best learned when real-world information becomes the focus of student activities. From the first day of class, students will interact in Spanish with the instructor and with classmates. Therefore, by the end of this course, students should be able to successfully handle in Spanish a significant number of basic communicative tasks.

SPANISH III *2124

Prerequisites: Spanish I & II

Description: Spanish III, a course based on Indiana's Academic Standards for World Languages, builds upon effective strategies for Spanish language learning by facilitating the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to initiate, sustain and close conversations; exchange detailed information in oral and written form; and write cohesive information with greater detail. This course also emphasizes the continued development of reading and listening comprehension skills, such as using cognates, synonyms and antonyms to derive meaning from written and oral information, as well as comprehending detailed written or oral directions. Students will address the presentational mode by presenting student-created material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will continue to develop understanding of Spanish-speaking culture through recognition of the interrelations among the practices, products and perspectives of the target culture; discussion of significant events in the target culture; and investigation of elements that shape cultural identity in the target culture. This course further emphasizes making connections across content areas as well the application of understanding Spanish language and culture outside of the classroom.

MATHEMATICS

ALGEBRA I LAB *2516

Prerequisites: Must be enrolled in Algebra I

Description: Algebra I Lab is a mathematics support course for Algebra I. Algebra I Lab is taken while students are concurrently enrolled in Algebra I. This course provides students with additional time to build the foundations necessary for high school math courses, while concurrently having access to rigorous, grade-level appropriate courses. The five critical areas of Algebra I Lab align with the critical areas of Algebra I: Relationships between Quantities and Reasoning with Equations; Linear and Exponential Relationships; Descriptive Statistics; Expressions and Equations; and Quadratic Functions and Modeling. However, whereas Algebra I contains exclusively grade-level content, Algebra I Lab combines standards from high school courses with foundational standards from the middle grades.

ALGEBRA I *2520

Description: Algebra I formalizes and extends the mathematics students learned in the middle grades. The Indiana Academic Standards for Algebra I consist of five domains: Number Systems, Expressions, and Functions; Linear Equations, Inequalities, and Functions; Systems of Linear Equations and Inequalities; Quadratic and Exponential Equations and Functions; and Data Analysis & Statistics. These critical areas deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend. Students will also engage in methods for analyzing, solving, and using quadratic functions. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

ALGEBRA II *2522

Description: Algebra II builds on work with linear, quadratic, and exponential functions and allows for students to extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. The Indiana Academic Standards for Algebra II consist of six domains: Arithmetic and Structure of Expressions, Equations, and Functions; Function Families; Modeling with Functions and Data; Modeling with Advanced Algebra; Modeling with Data and Statistics; and Modeling with Quantities. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

GEOMETRY *2532

Description: Geometry formalizes and extends students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. The Indiana Academic Standards for Geometry consist of five domains: Geometry Foundations, Triangles, Quadrilaterals and Other Polygons, Circles, and Transformations & Three-Dimensional Solids. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

QUANTITATIVE REASONING *2550

(MATH 123 – IVY TECH)

Ivy Tech dual credit: MATH 123 – 3 college credits

Quantitative Reasoning is a weighted class for students who receive a B- or higher.

Description: Quantitative Reasoning is a mathematics course focused on the study of numeracy, ratio and proportional reasoning, modeling, probabilistic reasoning to assess risk, and statistics. Students build knowledge of and confidence with basic mathematical/analytical concepts and operations required for problem solving, decision making, and economic productivity in real-world applications and prepare for an increasingly information-based society in which the ability to use and critically evaluate information, especially numerical information, is essential. Technology, such as computers and graphing calculators, should be used frequently. This higher-level mathematics course is designed to align with college-level quantitative reasoning courses for dual secondary/college credit. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

PRE-CALCULUS *2564 /TRIGONOMETRY *2566

(MATH136 & MATH137 – IVY TECH)

Ivy Tech dual credit MATH 136 – 3 college credits, MATH 137 – 3 college credits

Pre-Calculus is a weighted class for students who receive a B- or higher

Description: Pre-Calculus: Algebra extends the foundations of algebra and functions developed in previous courses to new functions, including exponential and logarithmic functions, and to sequences and series. The course provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Pre-Calculus: Algebra is made up of five strands: Functions; Quadratic, Polynomial, and Rational Equations and Functions; Exponential and Logarithmic Functions; Sequences and Series; and Conics. The course is designed for students who expect math to be a major component of their future college and career experiences, and as such it is designed to provide students with strong foundations for calculus and other higher-level math courses. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Pre-Calculus: Trigonometry provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Trigonometry provides the foundation for common periodic functions that are encountered in many disciplines, including music, engineering, medicine, finance, and nearly all other STEM disciplines. Trigonometry consists of six strands: Unit Circle; Triangles; Periodic

Functions; Identities; Polar Coordinates and Complex Numbers; and Vectors. Students will advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. A strong understanding of complex and imaginary numbers is a necessity for fields such as engineering and computer programming. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

ACP CALCULUS *2527 (M215 – IU-K)

IU-K dual credit: M215 – 5 college credits

ACP Calculus is a weighted class for students who receive a B- or higher

Description: Calculus expands a student's knowledge of topics like functions, graphs, limits, derivatives, and integrals. Additionally, students will review algebra and functions, modeling, trigonometry, etc. Calculus is made up of five strands: Limits and Continuity; Differentiation; Applications of Derivatives; Integrals; and Applications of Integrals. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

INTEGRATED MATHEMATICS II *2556

Description: Integrated Mathematics II focuses on quadratic expressions, equations, and functions by comparing their characteristics and behavior to those of linear and exponential relationships from Integrated Mathematics I. The need for extending the set of rational numbers arises and real and complex numbers are introduced so that all quadratic equations can be solved. The link between probability and data is explored through conditional probability and counting methods, including their use in making and evaluating decisions. The study of similarity leads to an understanding of right triangle trigonometry and connects to quadratics through Pythagorean relationships. Circles, with their quadratic algebraic representations, rounds out the course. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

BUSINESS MATH I/II *4512

Description: Business Math is a course designed to prepare students for roles as entrepreneurs, producers, and business leaders by developing abilities and skills that are part of any business environment. A solid understanding of math including algebra, basic geometry, statistics, and probability provides the necessary foundation for students interested in careers in business and skilled trade areas. The content includes mathematical operations related to accounting, banking and finance, marketing, and management. Instructional strategies should include simulations, guest speakers, tours, Internet research, and business experiences.

PHYSICAL EDUCATION AND HEALTH

HEALTH AND WELLNESS *3506

Description: Health and Wellness, a course based on Indiana's Academic Standards for Health and Wellness and provides the basis to help students adopt and maintain healthy behaviors. Health education should contribute directly to a student's ability to successfully practice behaviors that protect and promote health and avoid or reduce health risks. Through a variety of instructional strategies, students practice the development of functional health information (essential concepts); determine personal values that support healthy behaviors; develop group norms that value a healthy lifestyle; develop the essential skills necessary to adopt, practice, and maintain health-enhancing behaviors. This course includes the application of priority areas in a planned, sequential, comprehensive health education curriculum. Priority areas include: promoting personal health and wellness, physical activity, and healthy eating; promoting safety and preventing unintentional injury and violence; promoting mental and emotional health, a tobacco- free lifestyle and an alcohol- and other drug-free lifestyle; and promoting human development and family health. This course provides students with the knowledge and skills of health and wellness core concepts, analyzing influences, accessing information, interpersonal communication, decision-making and goal-setting skills, health-enhancing behaviors, and health and wellness advocacy skills.

PHYSICAL EDUCATION I & II *3542 & *3544

Description: Physical Education I focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provides students with opportunities to actively participate in at least four of the following: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all of which are within the framework of the skills, knowledge, and confidence needed by the student for a lifetime of healthful physical activity and fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEPs and 504 plans (e.g., chronic illnesses, temporary injuries, obesity). See 511 IAC 7-27-9, 7-27-11.

Description: Physical Education II focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provides students with opportunities to actively participate in four of the following areas that were not included in Physical Education I: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all of which are within the framework of the skills, knowledge and confidence needed by the student for a lifetime of healthful physical activity and fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEPs and 504 plans (e.g., chronic illnesses, temporary injuries, obesity). See 511 IAC 7-27-9, 7-27-11.

ELECTIVE PHYSICAL EDUCATION (WEIGHTLIFTING) *3560

Description: Elective Physical Education, a course based on selected standards from Indiana's Academic Standards for Physical Education, identifies what a student should know and be able to do as a result of a quality physical education program. The goal of a physically educated student is to maintain appropriate levels of cardio-respiratory endurance, muscular strength and endurance, flexibility, and body composition necessary for a healthy and productive life. Elective Physical Education promotes lifetime sport and recreational activities and provides an opportunity for an in-depth study in one or more specific areas. A minimum of two of the following activities should be included: team sports; dual sports activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance. This course includes the study of physical development concepts and principles of sport and exercise as well as opportunities to develop or refine skills and attitudes that promote lifelong fitness. Students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEPs and 504 plans (e.g., chronic illnesses, temporary injuries, obesity). See 511 IAC 7-27-9, 7-27-11.

SCIENCE

BIOLOGY I *3024

Description: Biology I incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three-dimensional understanding of Biology topics. Disciplinary Core Ideas for this course include From Molecules to Organisms, Ecosystems, Heredity and Biological Evolution. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

BIOLOGY II *3026 (BIOL 101 – IVY TECH)

Ivy Tech dual credit: BIOL 101 – 3 college credits

This course is a weighted class for students who receive a B- or better.

Description: Biology II is an advanced laboratory, field, and literature investigations-based course. Students enrolled in Biology II examine in greater depth the structures, functions, and processes of living organisms. Students also analyze and describe the relationship of Earth's living organisms to each other and to the environment in which they live. In this course, students refine their scientific inquiry skills as they collaboratively and independently apply their knowledge of the unifying themes of biology to biological questions and problems related to personal and community issues in the life sciences.

CHEMISTRY I *3064

Description: Chemistry I incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three-dimensional understanding of Chemistry topics. Disciplinary Core Ideas for this course include Matter and its Interactions and Energy. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

EARTH AND SPACE SCIENCE *3044 (Offered in even graduation years)

Description: Earth and Space Science incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three-dimensional understanding of Earth and Space Science topics. Disciplinary Core Ideas for this course include Earth's Place in the Universe, Earth's Systems, and Human Interaction with Earth's Systems. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

INTEGRATED CHEMISTRY-PHYSICS (ICP) *3108 (Offered on odd graduation years)

Description: Integrated Chemistry and Physics incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three-dimensional understanding of Chemistry and Physics topics. Disciplinary Core Ideas for this course include Matter and its Interactions, Forces, Energy, and Waves and their Applications in Technologies for Information Transfer. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

ANATOMY AND PHYSIOLOGY I *5276 (offered during even graduation years)

APHY 101 – Ivy Tech

Ivy Tech dual credit: APHY 101 – 3 college credits

This course is a weighted class for students who receive a B- or better.

Description: Anatomy & Physiology is a course in which students investigate concepts related to Health Science, with emphasis on interdependence of systems and contributions of each system to the maintenance of a healthy body. It introduces students to the cell, which is the basic structural and functional unit of all organisms, and covers tissues, integumentary, skeletal, muscular, and nervous systems as an integrated unit. Through instruction, including laboratory activities, students apply concepts associated with Human Anatomy & Physiology. Students will understand the structure, organization and function of the various components of the healthy body in order to apply this knowledge in all health related fields.

ANATOMY AND PHYSIOLOGY II *5276 (offered during odd graduation years)

Ivy Tech dual credit: APHY 102 – 3 college credits

This course is a weighted class for students who receive a B- or better.

Description: Continues the study of the inter-relationships of the systems of the human body. Introduces students to the study of the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems. 1. List the basic requirements of the human body to sustain life. 2. Describe the structural hierarchy and levels of organization of the human body. 3. Describe the structure and function of the human organ systems. 4. Communicate in anatomical, directional, and medical terminology. 5. Explain the relationship of anatomy and physiology to basic health and pathology. 6. Identify and describe the structure, function, location, and secretions of the endocrine glands. 7. Identify and describe the formation, composition, functions, and types of blood. 8. Identify and describe the structure, function, and location of the heart and major blood vessels. 9. Identify and describe the structure, pathways, and function of the lymphatic system. 10. Identify and describe the structure and function of the respiratory system. 11. Identify and describe the structure and function of the digestive system. 12. Explain how nutrients function in metabolism, energy balance, and hormonal control. 13. Identify and describe the structure and function of the urinary system, including fluid and electrolyte balance. 14. Identify and describe the structure and function of the reproductive system. 15. Demonstrate proper use and understanding of: laboratory safety procedures; laboratory equipment such as microscopes, dissecting instruments, and physiologic instrumentation and analyses. 16. Demonstrate dissection skills.

PHYSICS *3084

This course is a weighted class for students who receive a B- or better.

Description: Physics I incorporates Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three dimensional understanding of Physics topics. Disciplinary Core Ideas for this course include Forces and Interactions, Energy, Wave Properties, and Electromagnetic Radiation. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

SOCIAL STUDIES

WORLD HISTORY AND CIVILIZATION *1548

Description: World History and Civilization emphasizes events and developments in the past that greatly affected large numbers of people across broad areas and that significantly influenced peoples and places in subsequent eras. Key events related to people and places as well as transcultural interaction and exchanges are examined in this course. Students are expected to compare and contrast events and developments involving diverse peoples and civilizations in different regions of the world. They will examine examples of continuity and change, universality and particularity, and unity and diversity among various peoples and cultures from the past to the present. Students are also expected to practice and process skills of historical thinking and research and apply content knowledge to the practice of thinking and inquiry skills and processes. There will be continuous and pervasive interactions of processes and content, skills and substance, in the teaching and learning of history.

U.S. HISTORY *1542

Description: United States History is a two-semester course that builds upon concepts developed in previous studies of U.S. History and emphasizes national development from the late nineteenth century into the twenty-first century. After reviewing fundamental themes in the early development of the nation, students are expected to identify and review significant events, persons, and movements in the early development of the nation. The course then gives major emphasis to the interaction of key events, people, and political, economic, social, and cultural influences in national developments from the late nineteenth century through the present as they relate to life in Indiana and the United States. Students are expected to trace and analyze chronological periods and examine the significant themes and concepts in U.S. History. Students develop historical thinking and research skills and use primary and secondary sources to explore topical issues and to understand the cause for changes in the nation over time.

ACP U.S. HISTORY *1542 (H105 & H106 – IU-K)

IU-K dual credit: H105- 3 college credits & H106 – 3 college credits

Must have a GPA for a 2.70 or higher to receive Dual Credits

This course is a weighted class for students who receive a B- or better.

Description: United States History is a two-semester course that builds upon concepts developed in previous studies of U.S. History and emphasizes national development from the late nineteenth century into the twenty-first century. After reviewing fundamental themes in the early development of the nation, students are expected to identify and review significant events, persons, and movements in the early development of the nation. The course then gives major emphasis to the interaction of key events, people, and political, economic, social, and cultural influences in national developments from the late nineteenth century through the present as they relate to life in Indiana and the United States. Students are expected to trace and analyze chronological periods and examine the significant themes and concepts in U.S. History. Students develop historical thinking and research skills and use primary and secondary sources to explore topical issues and to understand the cause for changes in the nation over time.

UNITED STATES GOVERNMENT *1540

Description: United States Government provides a framework for understanding the purposes, principles, and practices of constitutional representative democracy in the United States. Responsible and effective participation of citizens is stressed. Students understand the nature of citizenship, politics, and governments and understand the rights and responsibilities of citizens and how these are part of local, state, and national government. Students examine how the United States Constitution protects rights and provides the structure and functions of various levels of government. Analysis of how the United States interacts with other nations and the government's role in world affairs is included in this course. Using primary and secondary resources, students will articulate, evaluate, and defend positions on political issues. As a result, they will be able to explain the role of individuals and groups in government, politics, and civic activities and the need for civic and political engagement of citizens in the United States.

ECONOMICS *1514

Description: Economics examines the allocation of resources and their uses for satisfying human needs and wants. The course analyzes economic reasoning and behaviors of consumers, producers, savers, investors, workers, voters, institutions, governments, and societies in making decisions. Students explain that because resources are limited, people must make choices and understand the role that supply, demand, prices, and profits play in a market economy. Key elements of the course include the study of scarcity and economic reasoning; supply and demand; market structures; the role of government; national economic performance; the role of financial institutions; economic stabilization; and trade.

COMMUNITY SERVICE *0524

Description: Community Service is a course created by public law IC 20-30-14. Community service allows students in grades nine through twelve (HEA 1629) the opportunity to earn up to two high school credits for completion of approved community service projects or volunteer service that “relates to a course in which the student is enrolled or intends to enroll.” For each student who wishes to earn credit for community service or volunteer service under this law, the student, a teacher of the student, or a community or volunteer service organization must submit an application to the high school principal including: 1) name of the community service organization or volunteer service organization the student intends to assist; 2) name, address, and telephone number of the director or supervisor of the community service organization or volunteer service organization and, if different from the director or supervisor, the name, address, and telephone number of the individual assigned by the community or volunteer service organization to supervise the student at the activity site; 3) nature of the community service or volunteer service performed by the student with a certification that the service performed by the student is voluntary; 4) total number of hours the student intends to serve the community service organization or volunteer service organization during the school year; 5) written statement by the director or the supervisor of the community service organization or volunteer service organization certifying that the information included in the application is an accurate reflection of: (a) the student's expectations with regard to the number of hours of service contemplated to be performed; and (b) the community service organization's or the volunteer service organization's need to acquire the student's service; 6) description of: (a) the educational or career exploration benefits the student and the school should expect to gain, including the student learning standards to be achieved, from the student's community or volunteer service participation; and (b) the service and benefit the community service organization or volunteer service organization expects to gain from the student's participation; 7) the description of how the community or volunteer service activity relates to a course in which the student is enrolled or intends to enroll; 8) manner and frequency in which the student and the community or volunteer service activity will be evaluated; 9) the name of the certificated school employee who will be responsible for monitoring and evaluating the student's activity and performance and assigning the student a grade for participation under this section; and 10) any other information required by the principal.



INDIANA COMMISSION *for*
HIGHER EDUCATION

Pathways offered at Frontier

High School Career and Technical Education
Course Titles and Descriptions 2026-2027



Agriculture

Cluster-Agriculture	Career Pathway	Principles Level 1	CTE Concentrator A Level I	CTE Concentrator B Level I	Pathway Capstone Level II
Agriculture	Ag Mechanical and Engineering	Principles of Agriculture	Agriculture Power, Structures & Technology	Agri. Structures Fabrication and Design	Agriculture Mechanization & Technology Capstone
Agriculture	Agriscience - Animals	Principles of Agriculture	Animal Science	Adv. Life Science, Animals	Agricultural Research Capstone
Agriculture	Landscaping	Principles of Agriculture	Horticulture Science	Landscape and Turf Management	Landscape Management Capstone

*Capstone Level II classes are senior level work-based learning classes approved by instructor.

PRINCIPLES OF AGRICULTURE *7117

Ivy Tech: AGRI 100 – 3 college credits & AGRI 102 – 3 college credits

Description: Principles of Agriculture exposes students to the diversity of career options found within the agricultural industry and to other agribusiness concepts. Students will develop an understanding of the role of agriculture in the United States and globally. Students will explore Agriculture, Food, and Natural Resource (AFNR) systems related to the production of food, fiber and fuel and the associated health, safety and environmental management systems. Topics covered in the course range from animals, plants, food, natural resources, ag power, structures and technology, and agribusiness. Participation in FFA and Supervised Agricultural Experiences (SAE) will be an integral part of this course in order to develop leadership and career ready skills.

AGRICULTURAL POWER, STRUCTURE AND TECHNOLOGY *5088

Required Prerequisites: Principles of Agriculture

Ivy Tech: AGRI 106 – 3 college credits

Description: Agriculture Power, Structure and Technology is a lab-intensive course in which students develop an understanding of the basic principles of tool selection, operation, maintenance, and management of agricultural equipment in concert with the utilization of technology. Topics covered include: safety, problem-solving/troubleshooting, electricity, plumbing, concrete, carpentry, metal technology, engines, emerging technologies, leadership development, supervised agricultural experience, and career opportunities in the area of agriculture power, structure, and technology

AGRICULTURE STRUCTURES: FABRICATIONS AND DESIGN *7112

Prerequisites: Principles of Agriculture

Description: Agricultural Structures: Fabrication and Design focuses on metal work and agricultural structures. This course allows students to develop skills in welding and metalworking, construction, fabrication, machine

components and design while incorporating the engineering design process. Students will also cover safety topics for each area while demonstrating appropriate health and safety standards.

ANIMAL SCIENCE *5008

Prerequisites: Principles of Agriculture

Ivy Tech: AGRI 103 – 3 college credits

Description: Animal Science provides students with an overview of the animal agriculture industry. Students participate in a variety of activities and laboratory work including real and simulated animal science experiences and projects. All areas that the students study may be applied to both large and small animals. Topics to be covered in the course include: history and trends in animal agriculture, laws and practices relating to animal agriculture, comparative anatomy and physiology of animals, biosecurity threats and interventions relating to animal and human safety, nutrition, reproduction, careers, leadership, and supervised agricultural experiences relating to animal agriculture.

ADVANCED LIFE SCIENCE: ANIMALS *5070

Prerequisites: Principles of Agriculture

Ivy Tech: AGRI 107 – 3 college credits

Description: Advanced Life Science: Animals provides students with opportunities to participate in a variety of activities including laboratory work. Students will explore concepts related to history and trends in animal agriculture as related to animal welfare, husbandry, diseases and parasites, laws and practices relating to handling, housing, environmental impact, global sustainable practices of animal agriculture, genetics, breeding practices, biotechnology uses, and comparative knowledge of anatomy and physiology of animals used in animal agriculture.

HORTICULTURE SCIENCE *5132 (Offered odd graduation years)

Prerequisites: Principles of Agriculture

Ivy Tech: AGRI 116 – 3 college credits

Description: Horticulture Science provides students with a background in the field of horticulture. Coursework includes hands-on activities that encourage students to investigate areas of horticulture as it relates to the biology and technology involved in the production, processing, and marketing of horticultural plants and products. Students are introduced to the following areas of horticulture science: reproduction and propagation of plants, plant growth, growth-media, management practices for field and greenhouse production, marketing concepts, production of plants of local interest, greenhouse management, floral design, and pest management. Students participate in a variety of activities including extensive laboratory work usually in a school greenhouse.

LANDSCAPE AND TURF MANAGEMENT *7115 (Offered even graduation years)

Prerequisites: Principles of Agriculture

Ivy Tech: AGRI 164 – 3 college credits

Description: Landscape and Turf Management provides students with an overview of the many career opportunities in the diverse field of landscape and turf management. Students are introduced to the procedures used in the planning and design of a landscape using current technology practices, the principles and procedures involved with landscape construction, the determination of maintenance schedules, communications, and management skills necessary in landscaping operations, and the care and use of equipment utilized by landscapers. Upon completion of the program, students have the opportunity to become Indiana Landscape Industry Certified through a state approved program.

AGRICULTURE MECHANIZATION AND TECHNOLOGY CAPSTONE *7228

Required Prerequisites: Ag Power, Structures and Technology; Ag Structures Fabrication and Design

Description: The Agriculture Mechanization and Technology Capstone builds upon the knowledge and skills developed in the Principles, Ag Power, Structures and Technology, Agricultural Structures Fabrication and Design courses by developing advanced skills that students can apply to the field. Students enrolled in this course will participate in lab activities involving agricultural equipment such as fueled power engines, electrical motors, pneumatic and hydraulic systems, etc. Students will be instructed on the operation, maintenance, repair, engineering and design of the agricultural mechanics and technology systems. As a capstone course, students should have the opportunity to apply their knowledge and use skills through an intensive work-based learning experience.

LANDSCAPE MANAGEMENT CAPSTONE *7234

Required Prerequisites: Principles of Agriculture; Horticultural Science; Landscape and Turf Management

Description: The Landscape Capstone course builds upon the knowledge and skills developed in the Principles, Horticultural Science and Landscape and Turf Management courses by developing advanced skills that students can apply to the field. As a capstone course, students should have the opportunity to apply their knowledge and use skills through an intensive work-based learning experience.

AGRICULTURAL RESEARCH CAPSTONE *7262

Required Prerequisites: Any Agriculture Concentrator Sequence

Description: The Agricultural Research Capstone includes extended laboratory, field, and literature investigations in one or more specialized agricultural science disciplines, such as animal, plant, food, natural resources, biotechnology, engineering, etc. Students enrolled in this course will apply scientific applications, concepts, principles, and design processes to solve complex, real-world issues in agriculture. Students will become familiar with laboratory procedures used in an educational, research, or industrial setting. Students will complete an end-of-course project and presentation, such as a scientific research paper, agriscience fair project, or some other suitable presentation of their findings. This course can be used as a capstone experience for any agriculture pathway.

Family Consumer Science

Cluster-FACS	Career Pathway	Principles Level 1	CTE Concentrator A Level I	CTE Concentrator B Level I	Pathway Capstone Level II
Hospitality, Events, & Tourism	Culinary Arts	Principles of Culinary and Hospitality	Nutrition	Culinary Arts	Culinary Capstone/ Pastry Capstone
Education	Education Professions	Principles of Teaching	Child Development	Teaching and Learning	Education Professions Capstone

*Capstone Level II classes are senior level work-based learning classes approved by instructor.

PRINCIPLES OF CULINARY AND HOSPITALITY *7173

Ivy Tech: HOSP 101 – 3 college credits & HOSP 102 – 3 college credits

Description: Principles of Culinary and Hospitality is designed to develop an understanding of the hospitality industry and career opportunities, and responsibilities in the food service and lodging industry. Introduces procedures for decision making which affects operation management, products, labor, and revenue. Additionally, students will learn the fundamentals of food preparation, basic principles of sanitation, service procedures, and safety practices in the food service industry including proper operation techniques for equipment.

NUTRITION *7171 (offered odd graduation years)

Prerequisites: Principles of Culinary and Hospitality

Ivy Tech: HOSP 104 Nutrition – 3 college credits

Description: Nutrition students will learn the characteristics, functions and food sources of the major nutrient groups and how to maximize nutrient retention in food preparation and storage. Students will be made aware of nutrient needs throughout the life cycle and to apply those principles to menu planning and food preparation. This course will engage students in hands-on learning of nutritional concepts such as preparing nutrient dense meals or examining nutritional needs of student athletes.

CULINARY ARTS *7169 (offered even graduation years)

Prerequisites: Principles of Culinary and Hospitality

Ivy Tech: HOSP 105 – 3 college credits

Description: Culinary Arts teaches students how to prepare the four major stocks, the five mother sauces (in addition to smaller sauces) and various soups. Additional emphasis is placed on the further development of the classical cooking methods. This course will also present the fundamentals of baking science including terminology, ingredients, weights and measures, and proper use and care of equipment. Students will produce yeast goods, pies, cakes, cookies, and quick breads.

CULINARY CAPSTONE *7233

Prerequisites: Principles of Culinary and Hospitality; Nutrition; Culinary Arts

Description: This course covers the techniques and skills needed in breakfast cookery as well as insight into the pantry department. Various methods of preparation of eggs, pancakes, waffles and cereals will be discussed. Students will receive instruction in salad preparation, salad dressing, hot and cold sandwich preparation, garnishes and appetizers. This course also covers the necessary skills for proper recruiting, staffing, training, and management of employees at various levels. The course will help prepare the student for the transition from employee to supervisor. Additionally, it will help the student evaluate styles of leadership, and develop skills in human relations and personnel management.

PASTRY CAPSTONE *7235

Prerequisites: Principles of Culinary and Hospitality; Nutrition; Culinary Arts

Description: The objective of this course is to help students understand the science of baking and the different reactions that take place based on the ingredients, temperatures, and equipment in relation to the final product. The course requires students to produce and finish a variety of cakes. The course emphasizes application techniques, color coordination, and the flavor and texture of fillings. Students will practice the techniques of basic cake decorating. This course will also address classical French and European desserts, including the preparation of goods such as Napoleons, Gateau St. Honoré, petit fours and petit fours sec, ganaches, pastry creams and fillings, sauces, flans and tarts, and European sponges. The course also includes instruction in tempering of chocolates, molding, and chocolate plastique, preparation of truffles, pastillage and marzipan, short doughs, and meringues. The student will be instructed in the latest preparation methods, innovative ideas for impressive plate presentations, and techniques that utilize specialized equipment and tools to make high-tech, novel creations.

PRINCIPLES OF TEACHING *7162

Description: This course provides a general introduction to the field of teaching. Students will explore educational careers, teaching preparation, and professional expectations as well as requirements for teacher certification. Current trends and issues in education will be examined. A minimum 20 hour classroom observation experience is required for successful completion of this course.

CHILD AND ADOLESCENT DEVELOPMENT *7157 (offered odd graduation years)

Prerequisites: Principles of Teaching

Description: Child and Adolescent Development examines the physical, social, emotional, cognitive, and moral development of the child from birth through adolescence with a focus on the middle years through adolescence. Basic theories of child development, biological and environmental foundations of development, and the study of children through observation and interviewing techniques are explored. The influence of parents, peers, the school environment, culture, and the media are discussed. An observation experience up to 20 hours may be required for completion of this course. This course has been approved to be offered for dual credit. Students pursuing this course for dual credit are still required to meet the minimum prerequisites for the course and pass the course with a C or better in order for dual credit to be awarded.

TEACHING AND LEARNING *7162 (offered even graduation years)

Prerequisites: Principles of Teaching

Description: Teaching and Learning provides students the opportunity to apply many of the concepts that they have learned throughout the Education Professions pathway. In addition to a focus on best practices, this course will provide an introduction to the role that technology plays in the modern classroom. Through hands-on experience with educational software, utility packages, and commonly used microcomputer hardware, students will analyze ways to integrate technology as a tool for instruction, evaluation, and management.

EDUCATION PROFESSIONS CAPSTONE *7267

Prerequisites: Principles of Teaching, Child and Adolescent Development, Teaching and Learning

Description: The Education Professions Capstone provides an extended opportunity for field experience to further apply concepts that have been presented throughout the pathway. Students will also have the opportunity to explore the topics of the exceptional child and literacy development through children's literature. Students will gain a deeper understanding of inclusive teaching techniques along with policies, theories, and laws related to special education. Students interested in pursuing a career in Elementary Education are encouraged to also study the benefits of using children's literature in the classroom. This course may be further developed to include specific content for students interested in pursuing a career in secondary education. The course should include a significant classroom observation and assisting experience.

Business / Graphics

Cluster-Business	Career Pathway	Principles Level 1	CTE Concentrator A Level I	CTE Concentrator B Level I	Pathway Capstone Level II
Arts, Entertainment, and Design	Digital Design	Principles of Digital Design	Digital Design Graphics	Graphic Design and Layout	Digital Design Capstone
Marketing, Sales, and Entrepreneurship	Marketing and Sales	Principles of Business Management	Marketing Fundamentals	Digital Marketing	Business Management Capstone

*Capstone Level II classes are senior level work-based learning classes approved by instructor.

PRINCIPLES OF BUSINESS MANAGEMENT *4562

Ivy Tech: BUSN 101 – 3 college credits & BOAT 207 – 3 college credits

Description: Principles of Business Management examines business ownership, organization principles and problems, management, control facilities, administration, financial management, and development practices of business enterprises. This course will also emphasize the identification and practice of the appropriate use of technology to communicate and solve business problems and aid in decision making. Attention will be given to developing business communication, problem-solving, and decision-making skills using spreadsheets, word processing, data management, and presentation software.

MARKETING FUNDAMENTALS *5914

Prerequisites: Principles of Business Management

Ivy Tech: MKTG 101 – 3 college credits

Description: Marketing Fundamentals provides a basic introduction to the scope and importance of marketing in the global economy. Course topics include the seven functions of marketing: promotion, channel management, pricing, product/service management, market planning, marketing information management, and professional selling skills. Emphasis is marketing content but will involve use of oral and written communications, mathematical applications, problem-solving, and critical thinking skills through the development of an integrated marketing plan and other projects.

DIGITAL MARKETING *7145

Prerequisites: Principles of Business Management; Marketing Fundamentals

Ivy Tech: MKTG 252 – 3 college credits & MKTG 257 – 3 college credits

Description: Digital Marketing provides an introduction to the world of e-commerce and digital marketing media. The course covers how to integrate digital media and e-commerce into organizational and marketing strategy. Students will explore e-commerce applications and the most popular digital marketing tactics and tools. Emphasizes familiarity with executing digital media, understanding the marketing objectives that digital media can help organizations achieve, and establishing and enhancing an organization's digital marketing presence.

BUSINESS MANAGEMENT CAPSTONE *7201

Prerequisites: Principles of Business Management; Marketing Fundamentals, Digital Marketing

Description: The Business Administration Capstone course will allow students to explore advanced topics in business leadership including Human Resources and International Business. Additionally students will have the chance to complete Managerial Accounting. Throughout the course students will develop business communication skills through work on projects, labs, and simulations. All of these courses represent key business competencies required by nearly all postsecondary Business schools.

PRINCIPLES OF DIGITAL DESIGN *7140

Ivy Tech: VISC 101 – 3 college credits & PHOT 104 – 3 college credits

Description: Principles of Digital Design introduces students to fundamental design theory. Investigations into design theory and color dynamics will provide experiences in applying design theory, ideas and creative problem solving, critical peer evaluation, and presentation skills. Students will have the opportunity to apply the design theory through an understanding of basic photographic theory and technique. Topics will include image capture, processing, various output methods, and light.

DIGITAL DESIGN GRAPHICS *7141

Prerequisites: Principles of Digital Design

Ivy Tech: VISC 102 – 3 college credits & VISC 115 – 3 college credits

Description: Digital Design Graphics will help students to understand and create the most common types of computer graphics used in visual communications. Skills are developed through work with professional vector-based and page layout software used in the industry. Additionally, students will be introduced to a full range of image input technology and manipulation including conventional photography, digital imaging, and computer scanners. Students will learn to communicate concepts and ideas through various imaging devices.

GRAPHIC DESIGN AND LAYOUT *5550

Prerequisites: Principles of Digital Design; Digital Design Graphics

Ivy Tech: VISC 102 Raster Graphics I/ VISC 115 Graphic Design

Description: Graphic Design and Layout teaches design process and the proper and creative use of type as a means to develop effective communications for global, corporate and social application. Students will create samples for a portfolio, which may include elements or comprehensive projects in logo, stationery, posters, newspaper, magazine, billboard, and interface design.

DIGITAL DESIGN CAPSTONE *7246

Prerequisites: Principles of Digital Design; Digital Design Graphics, Graphic Design & Layout

Description: The Digital Design Capstone course provides students the opportunity to dive deeper into advanced concepts of Visual Communication including user experience/user interface design, video production editing, animation and/or web design. Depending on the length of the course, students may focus their efforts on one area or explore multiple aspects.

Health & Human Services

Cluster-Health & Human Services	Career Pathway	Principles Level 1	CTE Concentrator A Level I	CTE Concentrator B Level I	Pathway Capstone Level II
Health & Human Services	Pre-Nursing / Healthcare Specialist	Principles of Healthcare	Healthcare Fundamentals	Healthcare Specialist: CNA (Held at TL or BC)	Healthcare Specialist Capstone (Held at TL or BC)
Health & Human Services	Exercise Science	Principles of Exercise Science	Kinesiology	Human Performance	Physical Therapy Capstone

*Capstone Level II classes are senior level work-based learning classes approved by instructor.

PRINCIPLES OF HEALTHCARE *7168

Ivy Tech: HLHS 100 – 3 college credits

Description: Principles of Healthcare content examines skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, and an introduction to healthcare systems. Lab experiences are organized and planned around the activities associated with the student's career objectives.

HEALTHCARE FUNDAMENTALS *5274

Prerequisites: Principles of Healthcare

Ivy Tech: HLHS 101 – 3 college credits

Description: Healthcare Fundamentals prepares students with language skills necessary for effective, independent use of health and medical reference materials. It includes the study of health and medical abbreviations, symbols, and Greek and Latin word part meanings, all taught within the context of body systems. Introduces cells, tissues, and human anatomy highlighting essential physiological principles through a systemic approach. Additionally, the course provides a general overview of basic concepts and terminology used in anatomy and physiology as applicable to health sciences and healthcare occupations. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal and written information in the healthcare industry. Students have the opportunity to acquire essential skills for accurate and logical communication, and interpretation of medical records. Emphasis is on forming a foundation of a medical vocabulary including appropriate and accurate meaning, spelling, and pronunciation of medical terms, abbreviations, signs, and symbols.

HEALTHCARE SPECIALIST: CNA *7166

Required Prerequisites: Principles of Healthcare

Description: The Healthcare Specialist: CNA course prepares individuals desiring to work as nursing assistants with the knowledge, skills, and attitudes essential for providing basic care in extended care facilities, hospitals, and home health agencies under the direction of licensed nurses. The course will introduce students to the disease process and aspects of caring for a long-term care resident with dementia. Individuals who successfully complete this course are eligible to apply to sit for the Indiana State Department of Health (ISDH)

certification exam for nursing assistants. This course meets the minimum standards set forth by the ISDH for Certified Nursing Assistant (CNA) training and for health care workers in long-term care facilities.

HEALTHCARE SPECIALIST CAPSTONE *7255

Required Prerequisites: Principles of Healthcare, Healthcare Fundamentals, Healthcare Specialist: CNA

Description: The Healthcare Specialist Capstone course will facilitate healthcare students' acquisition of additional knowledge and skills necessary to work in a variety of healthcare settings beyond a long term care facility including hospitals, doctors' offices, and clinics. Students can accomplish this goal by completing coursework that will cover topics such as Medical Law and Ethics, Electronic Health Records, and/or Behavioral Health. Schools may offer additional healthcare certifications such as the Certified Clinical Medical Assistant (CCMA) or Phlebotomy along with the coursework or in place of the coursework.

PRINCIPLES OF EXERCISE SCIENCE *7320

Vincennes: PFWL 100 – 3 college credits

Description: Principles of Exercise Science provides an introduction to the science of exercise and human movement. Special topics include exercise physiology, sport biomechanics, sports medicine, and motor integration. Additionally, the course will examine career options in sport, health and wellness, education, and the medical fields such as personal training, athletic training, and physical therapy.

KINESIOLOGY *7321

Prerequisites: Principles of Exercise Science

Vincennes: PHED 150 – 3 college credits

Description: Kinesiology students will study fundamental concepts concerning the interaction of biological and mechanical aspects of the musculoskeletal and neuromuscular structures. An emphasis on practical applications of the concepts will be accomplished through an introduction to fitness training methods and modalities for developing specific conditioning effects in individuals. Laboratory sessions focus on anatomy and physiology of the musculoskeletal and cardiovascular systems, theories on fitness programming, and injury avoidance in fitness environments.

HUMAN PERFORMANCE *7322

Prerequisites: Principles of Exercise Science

Vincennes: PHED 212 – 3 college credits

Description: Students in Human Performance will learn basic human physiology relating to exercise and how the body adapts to acute and chronic physical activity. Systems covered include cellular metabolic processes, energy systems, and the effects of exercise on the respiratory, nervous, cardiovascular, endocrine, skeletal, and muscular systems. The course will also study the basic nutritional principles needed for optimal athletic and human performance.

PHYSICAL THERAPY CAPSTONE *7323

Prerequisites: Principles of Exercise Science; Kinesiology; Human Performance

Description: The Physical Therapy Capstone course is designed to provide students the opportunity to explore the role of a physical therapy assistant and to practice technical skills previously learned in the classroom. It prepares students with the knowledge, skills, and attitudes essential for providing basic care in extended care facilities, hospitals, and home health agencies under the direction of licensed physical therapists. In addition, students will learn skills specific to physical therapy including observing patients' progress, helping patients do specific exercises, using massage and stretching for treatment, aiding patients with devices for movement, educating patients and families, and basic assisting in cleaning treatment areas and clerical work.

Automotive Services

Cluster-Auto Service	Career Pathway	Principles Level 1	CTE Concentrator A Level I	CTE Concentrator B Level I	Pathway Capstone Level II
Supply Chain and Transportation	Automotive Services	Principles of Automotive Services	Brake Systems	Steering and Suspensions	Automotive Service Capstone

*Capstone Level II classes are senior level work-based learning classes approved by instructor.

PRINCIPLES OF AUTOMOTIVE SERVICES *7213

Description: Principles of Automotive Services gives students an overview of the operating and general maintenance systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the automotive industry. Students will study the maintenance and light repair of automotive systems. Also, this course gives students an overview of the electrical operating systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the electrical diagnosis and repair in the automotive electrical industry. Students will study the fundamentals of electricity and automotive electronics.

BRAKE SYSTEMS *7205

Required Prerequisites: Principles of Automotive Services

Description: Brake Systems teaches theory, service, and repair of automotive braking systems. This course provides an overview of various mechanical brake systems used on today's automobiles. This course will emphasize professional diagnosis and repair methods for brake systems.

STEERING AND SUSPENSIONS *7212

Required Prerequisites: Principles of Automotive Services

Description: Steering and Suspensions will cover driveline theory and in-car service procedures. Theory and overhaul procedures related to the driveshaft and axle assemblies for front and rear wheel drive vehicles are included as well. Additionally, the course teaches theory, service and repair of automotive steering, and suspension systems. It provides an overview of various mechanical, power, and electrical steering and suspension systems used on today's automobiles and will emphasize professional diagnosis and repair methods for steering and suspension systems.

AUTOMOTIVE SERVICE CAPSTONE *7375

Required Prerequisites: Principles of Automotive Services; Brake Systems; Steering and Suspensions

Description: Automotive Service Capstone further explores important skills and competencies within the Automotive Service Technology Pathway. Students will be exposed to an in-depth study of vehicle electrical systems. The course will cover the fundamentals of electricity and automotive electronics in various automotive systems. Students will understand other topics such as engine repair, climate control, and driveline service. Additionally, Co-Op and Internship opportunities will be available for students.

Criminal Justice

Cluster-Law Enforcement	Career Pathway	Principles Level 1	CTE Concentrator A Level I	CTE Concentrator B Level I	Pathway Capstone Level II
Public Service and Safety	Criminal Justice	Principles of Criminal Justice	Law Enforcement Fundamentals	Corrections and Cultural Awareness	Criminal Justice Capstone

*Capstone Level II classes are senior level work-based learning classes approved by instructor.

PRINCIPLES OF CRIMINAL JUSTICE *7193

Description: Principles of Criminal Justice covers the purposes, functions, and history of the three primary parts of the criminal justice system: law enforcement, courts, and corrections. This course further explores the interrelationships and responsibilities of these three primary elements of the criminal justice system.

LAW ENFORCEMENT FUNDAMENTALS *7191

Prerequisites: Principles of Criminal Justice

Description: Law Enforcement Fundamentals critically examines the history and nature of the major theoretical perspectives in criminology and the theories found within those perspectives. Students analyze the research support for such theories and perspectives and the connections between theory and criminal justice system practice within all the major components of the criminal justice system. The course will allow students to demonstrate the application of specific theories to explain violent and non-violent criminal behavior on both the micro and macro levels of analysis. Additionally, this course will introduce fundamental law enforcement operations and organization. This includes the evolution of law enforcement at federal, state, and local levels.

CORRECTIONS AND CULTURAL AWARENESS *7188

Prerequisites: Principles of Criminal Justice; Law Enforcement Fundamentals

Description: Corrections and Cultural Awareness emphasizes the study of American criminal justice problems and systems in historical and cultural perspectives, as well as discussing social and public policy factors affecting crime. Multidisciplinary and multicultural perspectives are stressed. Additionally, this course takes a further examination of the American correctional system and the study of administration of local, state, and federal correctional agencies. The examination also includes the history and development of correctional policies and practices, criminal sentencing, jails, prisons, alternative sentencing, prisoner rights, rehabilitation, and community corrections including probation and parole. Current philosophies of corrections and the debates surrounding the roles and effectiveness of criminal sentences, institutional procedures, technological developments, and special populations are discussed.

CRIMINAL JUSTICE CAPSTONE *7231

Prerequisites: Principles of Criminal Justice; Law Enforcement Fundamentals, Corrections and Cultural Awareness

Description: The Criminal Justice Capstone course allows students to complete additional instruction to earn a postsecondary certificate and should include a work-based learning component such as job shadowing, internship, etc. once the core content is completed. Note: there may be age restrictions on work-based learning components.

Construction

Cluster-Law Enforcement	Career Pathway	Principles-Level 1	CTE Concentrator A-Level I	CTE Concentrator B-Level I	Pathway Capstone Level II
Construction	Construction Trades - Carpentry	Principles of Construction Trades	Construction Trades: General Carpentry	Construction Trades: Framing and Finishing	Construction Trades Capstone

*Capstone Level II classes are senior level work-based learning classes approved by instructor.

PRINCIPLES OF CONSTRUCTION TRADES *7130

Description: Principles of Construction Trades provides students with the basic skills needed to continue in a construction trade field. Covered topics include an introduction to the types and uses for common hand and power tools, learn the types and basic terminology associated with construction drawings, and basic worksite safety. Additionally, students study the roles of individuals and companies within the construction industry. Emphasis is placed on the importance of mathematical and communication skills within the construction industry.

CONSTRUCTION TRADES: GENERAL CARPENTRY *7123

Prerequisites: Principles of Construction Trades

Description: Construction Trades: General Carpentry builds upon the skills learned in the Principles of Construction Trades and examines the basics of framing. Students learn the procedures for laying out and constructing floor systems, wall systems, and ceiling joists. Students also spend time learning the principles of roof framing, and basic stair layout. Additionally, students will be introduced to building envelope systems.

CONSTRUCTION TRADES: FRAMING AND FINISHING *7122

Prerequisites: Principles of Construction Trades; Construction Trades: General Carpentry

Description: Construction Trades: Framing and Finishing prepares students with advanced framing skills along with interior and exterior finishing techniques. Covered topics include roofing applications, thermal and moisture protection, exterior finishing, cold-formed steel framing, drywall installation and finishing, doors and door hardware, suspended ceilings, window, door, floor, and ceiling trim, and cabinet installation.

CONSTRUCTION TRADES: GENERAL CARPENTRY CAPSTONE *7242

Required Prerequisites: Principles of Construction Trades; Construction Trades: General Carpentry; and Construction Trades: Framing and Finishing

Description: The Construction Trades: General Carpentry Capstone allows students to gain a deeper understanding and experience of the field of carpentry. This course builds upon the skills and concepts that students were first introduced to in Principles of Construction Trade, Construction Trades: General Carpentry, and Construction Trades: Framing and Finishing. Additional topics include an introduction to the National Electric Code, electrical safety, electrical circuits, basic electrical construction drawings, and residential electrical services. The course prepares students for the NCCER Carpentry Electrical Level 1 Certificates.

Cosmetology

Cluster-Law Enforcement	Career Pathway	Principles-Level 1	CTE Concentrator A-Level I	CTE Concentrator B-Level I	Pathway Capstone Level II
Health and Human Services	Cosmetology & Barbering	Principles of Barbering and Cosmetology	Barbering & Cosmetology Fundamentals	Advanced Cosmetology	Barbering and Cosmetology Capstone

Foundational CTE Courses

PERSONAL FINANCIAL RESPONSIBILITY *4540

Description: Personal Financial Responsibility addresses the identification and management of personal financial resources to meet the financial needs and wants of individuals and families, considering a broad range of economic, social, cultural, technological, environmental, and maintenance factors. This course helps students build skills in financial responsibility and decision making; analyze personal standards, needs, wants, and goals, identify sources of income, savings, and investing; understand banking, budgeting, record-keeping and manage risk, insurance and credit card debt. A project based approach and applications through authentic settings such as work based observations and service-learning experiences are appropriate. Direct, concrete applications of mathematics proficiencies in projects are encouraged.

COMPUTING FOUNDATIONS FOR A DIGITAL AGE *4565

Description: Computers and the internet have revolutionized the way we access and disseminate information. As technology continues to change at an ever-increasing pace, the need for students to gain a foundational understanding of computer science is clear. Computing Foundations for a Digital Age is designed to introduce students to five major topics within computer science including computing systems, networks and the internet, data and analysis, algorithms and planning, and impacts of computing. The course introduces foundational computing concepts while exploring current events and building critical thinking, collaboration, problem solving, and other important skills that are invaluable for life in a global and technologically advancing society.

SUPERVISED AGRICULTURAL EXPERIENCE (SAE)*5228 (Offered during summer)

Description: The Supervised Agricultural Experience (SAE) is designed to provide students with opportunities to gain experience in the agricultural field(s) in which they are interested. Students will apply knowledge

learned in the classroom, laboratory, and other training sites to real-life situations with a standards-based learning plan. Students work closely with their agriculture teacher(s), parents, and/or employers to get the most out of their SAE program. This course can be offered each year as well as during the summer session. Curriculum content and competencies need to be varied so that school year and summer session experiences are not duplicative.

PREPARING FOR COLLEGE AND CAREERS (PCC) *5394

Description: Preparing for College and Careers addresses the knowledge, skills, and behaviors all students need to be prepared for success in college, career, and life. The focus of the course is the impact of today's choices on tomorrow's possibilities. Topics to be addressed include twenty-first century life and career skills; higher order thinking, communication, leadership, and management processes; exploration of personal aptitudes, interests, values, and goals; examining multiple life roles and responsibilities as individuals and family members; planning and building employability skills; transferring school skills to life and work; and managing personal resources. This course includes reviewing the national career clusters and Indiana's College and Career Pathways, in-depth investigation of one or more pathways, reviewing graduation plans, exploring postsecondary options and making career plans, and developing personal and career portfolios. A project based approach, including computer and technology applications, cooperative ventures between school and community, simulations, and real world experiences is recommended.

LEADERSHIP DEVELOPMENT IN ACTION *5237 (Available for students in FFA, BPA, FCCLA, and HOSA)

Prerequisites: Students must be in a local CTSO

Description: Leadership Development in Action is a project-based course in which students integrate higher order thinking, communication, leadership, and management processes to conduct Career and Technical Student Organization (CTSO) leadership projects at the local, state, or national level. Each student will create a vision statement, establish standards and goals, design and implement an action plan and timeline, reflect on accomplishments, and evaluate results.

ARTICULATED COURSES FOR FRONTIER JR/SR HIGH SCHOOL AND IVY TECH STATE COLLEGE ARTICULATED/DUAL CREDITS

Business/Graphics:	Principles of Business Mngt	BUSN 101/BOAT207 Intro to Business Intgregrated Microsoft Application
	Graphic Design & Layout	VISC 102 Raster Graphics I
	Principles of Digital Design	VISC 101/PHOT 104 Design Fundamentals Basic Photograhay
	Digital Design Graphics	VISC 115 Vector Graphics Des. Pub.
	Marketing Fundamentals	MKTG 101 Principles of Marketing/ MKTG 102 Principles of Selling
	Digital Marketing	MKTG 252 Intro to Digital Marketing /MKTG 257 Digital Marketing Management
Sciences:	Biology II	BIOL 101 Introductory Biology
	Anatomy & Physiology I	APHY 101 Anatomy & Physiology
	Anatomy & Physiology II	APHY 102 Anatomy & Physiology II
Agriculture:	Priciples of Ag	AGRI 100 Intro to Ag/ Ag Business & Farm Mgt
	Animal Science	AGRI 103 Animal Science
	Ag Power, Structure, & Technology	AGRI 106 Agricultural Mechanization
	Horticulture	AGRI 116 Survey of Horticulture
	Advanced Life Science Animal	AGRI 107 Advanced Life Science
	Landscape & Turf Management	AGRI 164 Landscape Design
Family Consumer Science:	Principles of Culinary & Hospitality	HOSP 101 Sanitation and First Aid HOSP102 Basic Food Theory & Safety
	Nutrition	HOSP104 Nutrition
	Culinary Arts	HOSP 105 Introduction to Baking
		HOSP 103 Soups, Stocks & Sauces
Health Science:	Principles of Healthcare	HLHS 100 Into to Healthcare
	Healthcare Fundamentals	HLHS 101 Medical Terminology
English:	Creative Writing	ENGL 202 Creative Writing
Math:	Quantitative Reasoning	MATH 123 Quantitative Reasoning
	Pre-Calculus	MATH 136 Pre-Calculus
		MATH 137 Trigonometry with Analytic Geometry

ARTICULATED COURSES FOR FRONTIER JR/SR HIGH SCHOOL AND INDIANA UNIVERSITY KOKOMO ARTICULATED/DUAL CREDITS

English:	ACP English 12 ACP English ACP Speech	W131 Reading, Writing & Inquiry L202 Literature S121 Public Speaking
History:	ACP US History	H105/H106 American History
Mathematics:	ACP Calculus	M215 Calculus
Spanish:	ACP Spanish II	S150 Elementary Spanish

ARTICULATED COURSES FOR FRONTIER JR/SR HIGH SCHOOL AND VINCENNES ARTICULATED/DUAL CREDITS

Exercise Science:	Principles of Exercise Science Human Performance Kinesiology	PFWL 100 PHED 212 PHED 150
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DUAL ENROLL COURSES

Students have the option of attending Ivy Tech Community College under the Dual Enroll Program. This program allows students to attend Ivy Tech and receive both high school and college credits during high school. Students must talk to the guidance department before applying to Ivy Tech. The guidance department will connect the student with the Ivy Tech designee. Students who attend classes taught by an Ivy Tech instructor may be eligible for 50% tuition reimbursement from the Frontier School Corporation. The student must receive a grade of "C" or better, provide an Ivy Tech transcript, and proof of tuition payment to receive reimbursement.



INDIANA COLLEGE CORE

The Indiana College Core consists of 30 semester hours of credit, the completion of which at one public institution means it can transfer as a block and count as satisfying the Indiana College Core equivalent at the receiving institution.

The Indiana College Core is based on competencies and learning outcomes in six areas:

Foundational Intellectual Skills

- ~ Quantitative Reasoning
- ~ Speaking and Listening
- ~ Written Communication

Ways of Knowing

- ~ Human and Artistic
- ~ Scientific
- ~ Social and Behavioral

Indiana College Core Classes offered at Frontier Jr. Sr. High School

Biology II – BIOL 101 (Ivy Tech) – 3 college credit hours

Pre-Calculus—MATH 136 and MATH 137 (Ivy Tech) – 6 college credit hours

ACP Calculus—M215 (IUK) – 5 college credit hours

Quantitative Reasoning—MATH 123 (Ivy Tech) – 3 college credit hours

ACP Speech—S121 (IUK) – 3 college credit hours

ACP English—W131 (IUK)- 3 college credit hours

Creative Writing—ENGL 202 (Ivy Tech) – 3 college credit hours

ACP US History- H105 and H106 (IUK) – 6 college credit hours

ACP Spanish II- S150 (IUK) – 4 college credit hours



Name: _____

<u>Written Communication- 3 credit hours minimum - no more than 6</u>	
W131 Reading, Writing, and Inquiry IUK (3)	
*ENGL 111 English Composition ITCC (3)	

<u>Speaking & Listening- 3 credit hours minimum - no more than 6</u>	
SI21 Public Speaking IUK (3)	
*COMM 101 Fundamentals of Public Speaking ITCC (3)	

<u>Quantitative Reasoning-3 credit hours minimum - no more than 15</u>	
MATH 123 Quantitative Reasoning ITCC (3)	
MATH 136 College Algebra ITCC (3)	
MATH 137 Trig with Analytic Geometry ITCC (3)	
M215 Calculus I IUK (5)	

<u>Scientific Ways of Knowledge-3 credit hours minimum - no more than 15</u>	
BIOL 101 Introductory Biology ITCC (3)	
*ASTR 101 Solar System Astronomy ITCC (3)	

<u>Social & Behavioral Ways of Knowing-3 credit hours minimum - no more than 15</u>	
H105 American History I IUK (3)	
H106 American History II IUK (3)	
*PSYC 101 Intro to Psychology ITCC (3)	
*SOCL 111 Intro to Sociology ITCC (3)	
*POLS 101 Intro to American Government & Politics ITCC (3)	
*ECON 101 Economics Fundamentals ITCC (3)	

<u>Humanistic Ways of Knowing- 3 credit hours minimum - no more than 15</u>	
HISP S150 Elementary Spanish II IUK (4)	
ENGL 202 Creative Writing ITCC (3)	
ENGL 206 ITCC (3) or L202-IUK (3)	
*ARTH 110 Art Appreciation ITCC (3)	
*PHIL 101 Introduction to Philosophy (3)	
*PHIL 102 Introduction to Ethics (3)	

* denotes classes offered only at Ivy Tech