



WHAT MATH COURSE SHOULD I TAKE?

This document provides guidance on selecting appropriate math courses based on educational and career pathways at Walla Walla Community College.

Pages 1-3, "**Determining Math by Program or Pathway**" focuses on listing specific programs and pathways, categorizing them by transfer (T), workforce (WF), or Bachelor of Applied Science (BAS) degrees, and recommending corresponding math courses for each. It starts from the program perspective and matches it to the required math course.

Pages 4-5, "**Determining Program or Pathway by Math**" takes a course-centric approach, listing math courses first and then outlining which programs require each course. It explains the content and purpose of each math course, such as statistics or calculus, and provides examples of programs that align with these courses.

WHAT MATH COURSE SHOULD I TAKE?

Search through this list of programs/pathways to find the most appropriate math course for your Educational and Career goals.

Key:

- T = Transfer pathway, provides foundation courses to transfer to another school
- WF = Workforce pathway, not intended to for transfer to another school
 - BAS = WWCC Bachelor of Applied Science degree

AGRICULTURE & NATURAL RESOURCES

PROGRAM / PATHWAY	DEGREE TYPE	MATH COURSE
Agricultural Systems	BAS	MATH&146-Intro to Statistics
Agricultural Business	WF	AMATH105- Intro to Quant. Problem Solving
	T	MATH&141-PreCalculus I*
Agricultural Education	T	MATH&146-Intro to Statistics
Agricultural Technology and Production Management	T	MATH&146-Intro to Statistics
Ag Science & Technology-Organic Agriculture	T	MATH&146-Intro to Statistics
Ag Science & Technology-Food Science	T	MATH&151-Calculus**
Animal Science	WF	AMATH105- Intro to Quant. Problem Solving
Animal Science-Pre-Veterinary Sciences & Animal Management	T	MATH&141 and 142-PreCalculus I and II
Integrated Agricultural Systems	WF	MATH&146-Intro to Statistics
Plant and Soil Science	WF	AMATH105- Intro to Quant. Problem Solving
	T	MATH&141-PreCalculus I
Enology and Viticulture	WF	AMATH105- Intro to Quant. Problem Solving
Earth Science	T	MATH&151-Calculus I**
Environmental & Ecosystem Sciences	T	MATH&141 and 142-PreCalculus I and II
Forestry	T	MATH&141 and 142-PreCalculus I and II
Irrigation Business Management	WF	AMATH105- Intro to Quant. Problem Solving
John Deere Technology	WF	AMATH105- Intro to Quant. Problem Solving
Turf Management	WF	AMATH105- Intro to Quant. Problem Solving
Wildlife Ecology & Conservation Sciences	T	MATH&141 and 142-PreCalculus I and II
Veterinary Technology	T	MATH&107-Math in Society

ARTS, HUMANITIES, & COMMUNICATIONS

PROGRAM / PATHWAY	DEGREE TYPE	MATH COURSE
Art	T	MATH&107-Math in Society
Communications	T	MATH&146-Intro to Statistics or MATH&107-Math in Society
English / Literature	T	MATH&107-Math in Society
Humanities	T	MATH&107-Math in Society
Spanish	T	MATH&107-Math in Society
Philosophy	T	MATH&107-Math in Society

BUSINESS & CONSUMER SERVICES		
PROGRAM / PATHWAY	DEGREE TYPE	MATH COURSE
Accounting Technology and Accounting Assistant	WF	BUS112-Business Math
Administrative Office Professional	WF	BUS112-Business Math
Applied Management & Entrepreneurship	BAS	MATH&146-Intro to Statistics
Business – Transfer (includes Accounting, Economics, Business Mgmt, etc.)	T	MATH&141 -PreCalculus I*
Business Administration	WF	BUS112-Business Math
Cosmetology	WF	BUS112-Business Math
Culinary Arts	WF	BUS112-Business Math
eMarketing	WF	BUS112-Business Math
Health Information Technology and Medical Billing & Coding Specialist	WF	BUS112-Business Math

EDUCATION & SOCIAL SCIENCES		
PROGRAM / PATHWAY	DEGREE TYPE	MATH COURSE
Anthropology	T	MATH&146-Intro to Statistics
Criminal Justice	WF T & BAS	AMATH105-Intro to Quant Problem Solving MATH&146-Intro to Statistics
Early Childhood Education	WF T	AMATH105- Intro to Quant. Problem Solving MATH&107-Math in Society OR MATH&131 and 132-Math for Elementary Education I and II
Elementary Education	T	MATH&131 and 132 – Math for Elementary Education
Secondary Education	T	Select Math course based on specific teaching subject area you wish to pursue.
History	T	MATH&146-Intro to Statistics
Human and Social Services	WF T	AMATH105- Intro to Quant. Problem Solving MATH&146-Intro to Statistics
Physical Education / Recreation	T	MATH&107-Math in Society
Political Science	T	MATH&146-Intro to Statistics
Psychology	T	MATH&146-Intro to Statistics
Sociology	T	MATH&146-Intro to Statistics
Social Work	T	MATH&146-Intro to Statistics

HEALTHCARE		
PROGRAM / PATHWAY	DEGREE TYPE	MATH COURSE
Nursing (Registered Nurse)	T	MATH&146-Intro to Statistics
Nursing Assistant	WF	None Required
Patient Navigation	WF	None Required
Phlebotomy	WF	None Required
Dental Hygiene	T	MATH&146-Intro to Statistics
Ultrasound Diagnostic Technology	T	MATH&146-Intro to Statistics
Medical Laboratory Technology	T	MATH&146-Intro to Statistics
Paramedicine	T	MATH&146-Intro to Statistics
Pharmacy Technology	T	MATH&146-Intro to Statistics
Radiology Technology	T	MATH&146-Intro to Statistics
Surgical Technology	T	MATH&146-Intro to Statistics
Occupational Therapy Technology	T	MATH&146-Intro to Statistics
Speech Therapy / Communication Disorders	T	MATH&146-Intro to Statistics
Physical Therapy Assistance	T	MATH&146-Intro to Statistics

MANUFACTURING, ELECTRICAL, TRANSPORTATION		
PROGRAM / PATHWAY	DEGREE TYPE	MATH COURSE
Automotive Repair Technology	WF	AMATH105- Intro to Quant. Problem Solving
Diesel Technology	WF	AMATH105- Intro to Quant. Problem Solving
Energy Systems Technology	WF	AMATH106-Quant. Problem Solving
Welding	WF	AMATH105- Intro to Quant. Problem Solving

SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH (STEM)		
PROGRAM / PATHWAY	DEGREE TYPE	MATH COURSE
Astronomy	T	MATH&151-Calculus I**
Biology	T	MATH&151-Calculus I**
Chemistry	T	MATH&151-Calculus I**
Computer Science	T	MATH&151-Calculus I**
Computer Science –Networking or Data Center Tech	WF	AMATH105- Intro to Quant. Problem Solving
Engineering	T	MATH&151-Calculus I**
Geology	T	MATH&151-Calculus I**
Math	T	MATH&151-Calculus I**
Nutrition	T	MATH&146-Intro to Statistics
Physics	T	MATH&151-Calculus I**

**Course is pre-requisite for higher level math course, MATH&148-Business Calculus.*

***Course has pre-requisites of both MATH&141-PreCalculus I and MATH&142-PreCalculus II*

WHAT MATH COURSE SHOULD I TAKE?

Search through this list of Math courses and how they apply towards Educational and Career Pathways.

Courses intended for Programs to Transfer to another school or program,
or WWCC's Bachelor of Applied Science degrees:

MATH&107 -MATH IN SOCIETY

Emphasizes mathematical reasoning, mathematical habits of thought, mathematical decision-making, mathematical communication, and the use of mathematical symbols, techniques and computations. Topics include proportional reasoning, mathematics of personal finance, probability, descriptive statistics, and growth and decay models (linear and exponential).

- Art
- English / Literature
- Communications (Or Statistics)
- Philosophy
- Physical Education / Recreation
- Spanish

MATH&131 & MATH&132 – MATH FOR ELEMENTARY EDUCATION I AND II

A two-course sequence designed to give prospective elementary education majors the depth of understanding necessary to teach mathematics in the elementary classroom. Designed for elementary school teachers focusing on methods of problem-solving, development and structure of number systems, and numerical algorithms applicable to elementary school mathematics.

- Early Childhood Education – Student may opt to take MATH&107
- Elementary Education

MATH&141 – PRECALCULUS I

The first in a series of two courses designed to give students an in-depth understanding of functions and to prepare students for calculus. Graphical analysis of concepts is emphasized through the use of technology.

MATH&148 also required

- Agricultural Business
- Business-*includes Accounting, Economics, Business Mgmt, etc.*

MATH&142-PreCalculus II also required

- Animal Science-PreVeterinary Sciences & Animal Mgmt
- Environmental & Ecosystem Sciences
- Forestry
- Wildlife Ecology & Conservation Sciences

Only MATH&141-PreCalculus required

- Plant and Soil Science
- Veterinary Technology-*Math requirements may vary from school to school. Consult with an advisor prior to enrolling in a Math class*

MATH&146 – STATISTICS

Study of both descriptive and inferential statistics. Topics include data presentation and analysis, measures of central tendency and dispersion, sampling distributions, parameter estimation, hypothesis testing, and linear regression.

- Ag Science & Technology-Organic Agriculture
- Agricultural Education
- Agricultural Systems (Bachelor of Applied Science)
- Agricultural Technology and Production Management
- Applied Management & Entrepreneurship (Bachelor of Applied Science)
- Communications
- Criminal Justice (includes Bachelor of Applied Science concentration)
- Dental Hygiene
- History
- Human and Social Services
- Integrated Agricultural Systems
- Medical Laboratory Technology
- Nursing (Registered Nurse)
- Nutrition
- Occupational Therapy Technology
- Paramedicine
- Pharmacy Technology
- Physical Therapy Assistance
- Political Science
- Psychology
- Radiology Technology
- Social Work
- Sociology
- Speech Therapy / Communication Disorders
- Surgical Technology
- Ultrasound Diagnostic Technology

MATH&151 – CALCULUS I

The first in a sequence of four calculus courses for students who are planning to major in engineering, mathematics, or the sciences. Graphical analysis of concepts is emphasized through the use of technology.

- *Calculus I requires both MATH&141 and 142-PreCalculus I and II as prerequisites if student does not place directly into Calculus I. Most pathways include Calculus II and III.*

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| • Ag Science & Technology-Food Science | • Earth Science |
| • Astronomy | • Engineering |
| • Biology | • Geology |
| • Chemistry | • Math |
| • Computer Science | • Physics |

Courses intended for Programs intended to not for Transfer,
but preparation to directly enter the Workforce upon completion.
These programs result in an Associates in Applied Sciences (AAS) degree or a certificate*.

AMATH105 – INTRODUCTION TO QUANTITATIVE PROBLEM SOLVING FOR THE TRADES

An introductory course in problem-solving for vocational and technical programs that uses basic computation (both without and with a calculator), pre-algebra, and introductory algebra and geometry skills. Course includes guided and independent practical problem solving, contextualized small-group classroom activities and open-ended projects. A prescribed problem-solving structure will be followed.

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|---|----------------------------------|
| • Agricultural Business | • Enology and Viticulture |
| • Animal Science | • Human and Social Services |
| • Automotive Repair Technology | • Industrial Mechanics |
| • Computer Science – Software or Data Center Tech | • Irrigation Business Management |
| • Criminal Justice | • John Deere Technology |
| • Diesel Technology | • Plant and Soil Science |
| • Early Childhood Education | • Turf Management |
| | • Welding |

AMATH106-QUANTITATIVE PROBLEM SOLVING FOR THE TRADES I

A course in problem solving for vocational and technical programs that uses basic pre-algebra, algebra, and geometry skills. Course includes guided and independent practical problem solving, contextualized small-group classroom activities and open-ended projects. A prescribed problem-solving structure will be followed.

- Energy Systems Technology

BUS112-BUSINESS MATHEMATICS

Develops competency in common business calculations for use in financial decision-making including: percentages, trade and cash discounts, pricing, simple and compound interest, discounting, annuities, and sinking funds.

Calculations performed on calculator and formulas developed for use in spreadsheet software.

- Accounting Technology and Accounting Assistant
- Administrative Office Professional
- Business Administration
- Cosmetology
- Culinary Arts
- eMarketing
- Health Information Technology and Medical Billing & Coding Specialist

*Please note other courses may be substituted to satisfy the Math requirement for some Workforce degrees.