

Laboratory Technician Certificate

One-Year Certificate of Completion

Students seeking employment in occupations involving research in a field or laboratory setting may complete a stand-alone certificate in Medical and Clinical Laboratory Technician or Biological and Biotechnology Laboratory Technician. Alternatively, a student may choose to apply these courses towards an AAS degree. The one-year certificate is an option for students seeking an entry-level occupation.

To earn the Laboratory Technician One-Year Certificate, students must satisfactorily complete all the requirements of the certificate including a minimum of 48 credits.

This certificate program focuses on the fundamental areas of biology, anatomy and physiology, genetics, histology, hematology, biotechnology, contemporary instrumentation, and Geographic Information Systems. Theory, application, and internship in contemporary and relevant clinical, laboratory, and field research are fully explored.

Program Learning Outcomes

Upon completion of the One-Year Laboratory Certificate, students will be able to:

- Explain and properly apply the scientific method.
- Prepare written and oral scientific communications that use tables, graphs, and sample calculations to report results.
- Critically evaluate contributions to science reported in all forms of media and be able to identify valid approaches to scientific inquiry, problem solving, and reporting.
- Demonstrate (show) proficiency in basic laboratory skills common to clinical and non-clinical research laboratories.
- Design, perform, and analyze results of experiments using basic molecular biology methodologies and recombinant DNA techniques.

Program Requirements

Number of credit hours necessary for completion: **49**

Required Courses

Student Success

- [CGS 100 - College Survival & Success](#) **3.00 credits**

Communications

Information Systems

- [CAS 133 - Intro to Computing Skills](#) **3.00 credits**
- [CAS 133L - Intro to Computing Skills Lab](#) **1.00 credit**

Writing

- [WRI 121 - English Composition I](#) **4.00 credits** or
- [WRI 121M - English Composition I](#) **5.00 credits**

Computation

- [MTH 111 - College Algebra](#) **5.00 credits**
- [MTH 243 - Statistics I](#) **4.00 credits**

Social Sciences

A minimum of three Social Sciences credits are required from these options.

Recommended:

- [PSY 225 - Abnormal Psychology I](#) **3.00 credits**

Social Science Course Options

- [Social Sciences course options](#)

Science

- [BIO 212 - Prin of Biology 2 \(Preprofessional\)](#) **4.00 credits**
- [BIO 212L - Prin of Bio 2 Lab](#) **1.00 credits**

Technical Core

Medical and Clinical Laboratory Technician Emphasis

- [BIO 207 - Medical Genetics](#) **3.00 credits**
- [BIO 207L - Medical Genetics Lab](#) **1.00 credits**
- [BIO 231 - Anatomy & Physiology I](#) **3.00 credits**
- [BIO 231L - Anat & Phys I Lab](#) **1.00 credits**
- [BIO 234 - Microbiology I](#) **4.00 credits**
- [BIO 234L - Microbiology I Lab](#) **1.00 credits**
- [BIO 240 - Forensic DNA Biology](#) **4.00 credits**
- [BIO 270 - Ecosystems](#) **4.00 credits**

Biological and Biotechnology Laboratory Technician Emphasis

- [BIO 240 - Forensic DNA Biology](#) **4.00 credits**
- [BIO 270 - Ecosystems](#) **4.00 credits**
- [GIS 234 - Geographic Information Systems I](#) **3.00 credits**
- [GIS 234L - Geographic Information Systems I Lab](#) **1.00 credits**
- [GIS 235 - Geographic Information Systems II](#) **3.00 credits**
- [GIS 235L - Geographic Information Systems II Lab](#) **1.00 credits**
- [GIS 236 - Geographic Information Systems III](#) **3.00 credits**
- [GIS 236L - Geographic Information Systems III Lab](#) **1.00 credits**

Social Sciences course options

- [BUS 285 - Human Relations in Organizations](#) **3.00 credits**
 - [ECO 201 - Principles of Economics: Microeconomics](#) **3.00 credits**
 - [ECO 202 - Principles of Economics: Macroeconomics](#) **3.00 credits**
 - [GEO 106 - Human Cultural Geography I](#) **3.00 credits**
 - [GEO 107 - Human Cultural Geography II](#) **3.00 credits**
 - [HST 101 - Western Civilization I: Ancient World to 1000](#) **3.00 credits**
 - [HST 101M - Western Civilization I](#) **5.00 credits**
 - [HST 102 - Western Civilization II: 1000 to 1800](#) **3.00 credits**
 - [HST 103 - Western Civilization III: 1800 to Present](#) **3.00 credits**
 - [HST 103M - Western Civilization II](#) **5.00 credits**
 - [HST 201 - United States History I: Colonial Period to 1840](#) **3.00 credits**
 - [HST 201M - United States History I](#) **5.00 credits**
 - [HST 202 - United States History II: 1840 to 1914](#) **3.00 credits**
 - [HST 203 - United States History III: 1914 to Present](#) **3.00 credits**
 - [HST 203M - United States History II](#) **5.00 credits**
 - [POL 201 - Intro to US Government](#) **3.00 credits**
 - [POL 203 - State & Local Government](#) **3.00 credits**
 - [PSY 101 - Psychology & Human Relations](#) **3.00 credits**
 - [PSY 201A - General Psychology I](#) **3.00 credits**
 - [PSY 201M - General Psychology I](#) **5.00 credits**
 - [PSY 202A - General Psychology II](#) **3.00 credits**
 - [PSY 202M - General Psychology II](#) **5.00 credits**
 - [PSY 203A - General Psychology III](#) **3.00 credits**
 - [PSY 225 - Abnormal Psychology I](#) **3.00 credits**
 - [PSY 228 - Positive Psychology](#) **4.00 credits**
 - [PSY 233 - Psychology of Violence and Aggression](#) **4.00 credits**
 - [PSY 235 - Human Growth & Development I](#) **3.00 credits**
 - [SOC 204 - Gen Sociology: Soc in Everyday Life](#) **3.00 credits**
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KLAMATH COMMUNITY COLLEGE

Medical and Clinical Laboratory Technician Certificate

Fall Term 2021

On Campus Courses

CGS100.03	College Survival & Success	MWF	1:00 – 1:50
CAS133.02	Intro to Computing Skills	MW	2:00 – 3:20
CAS133L.02	Intro to Computing Skills Lab	TR	2:00 – 3:20

Online Courses

CGS100.01DE	College Survival & Success
CAS133.02DE	Intro to Computing Skills
CAS133L.02DE	Intro to Computing Skills Lab
ECO201.01DE	Principles of Economics: Microeconomics (<u>Recommended:</u> Successful completion of MTH070 or above and WRI121 placement)
GEO107.01DE	Human Cultural Geography II (<u>Recommended:</u> WRI121 Placement)
HST201M.01DE	United States History I (<u>Recommended:</u> Placement scores at WRI121)
PSY225.01DE	Abnormal Psychology I (<u>Prerequisite:</u> WRI121)



KLAMATH COMMUNITY COLLEGE

Medical and Clinical Laboratory Certificate

Winter Term 2021

On Campus Courses

BIO240.01 Forensic DNA Biology M, W 8:00 – 11:50
(Prerequisites: MTH070 or MTH095 or MTH111 or placement into MTH095 or MTH111 and WRI121)

Online Courses

BIO212.01DE Principle of Biology 2 (Preprofessional)

BIO212L.01DE Principle of Biology 2 (Preprofessional) Lab
Prerequisites: MTH095 or MTH111 or placement into MTH111 and WRI095 or WRI121 or placement into WRI121.

MTH111.01DE College Algebra
(Prerequisite: MTH095 with a grade of “C” or better or placement into MTH 111)

MTH243.01DE Statistics I
(Prerequisite: MTH095 with a grade of “C” or better or MTH105 with a grade of “C” or better or MTH111 with a grade of “C” or better or placement into MTH111)

WRI121.01DE English Composition I

WRI121M.01DE English Composition I



KLAMATH COMMUNITY COLLEGE

Medical and Clinical Laboratory Technician Certificate

Spring Term 2022

On Campus Courses

PSY233.01 Psychology of Violence & Aggression T, R 2:30 – 4:20
(Prerequisite: WRI121 or placement into WRI121)

Online Courses

BIO270.01DE Ecosystems
(Prerequisites: BIO212 **or** ENV170 **and** MTH095 **or** MTH111 **or** placement into MTH111 **and** WRI095 **or** WRI121 **or** placement into WRI121)

ECO202.01DE Principles of Economics: Macroeconomics
(Recommended: Successful completion of MTH070 **or** above **and** WRI121 placement)

HST201M.01DE United States History I
(Recommended: Placement scores at WRI121)

PSY201M.01DE General Psychology I
(Prerequisite: MTH111. MTH111 can be taken concurrently with PHY201)